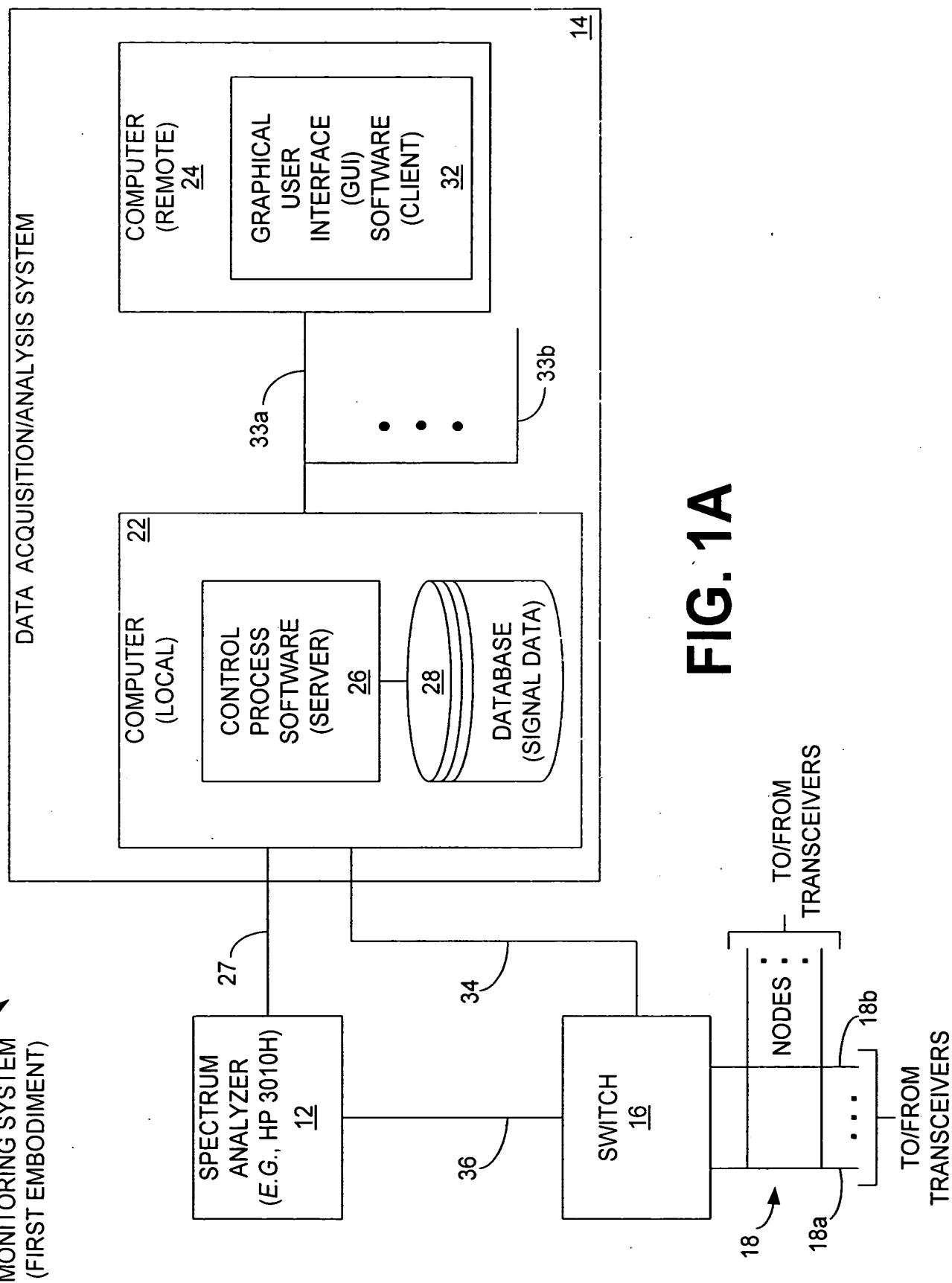


10' ———→  
MONITORING SYSTEM  
(FIRST EMBODIMENT)



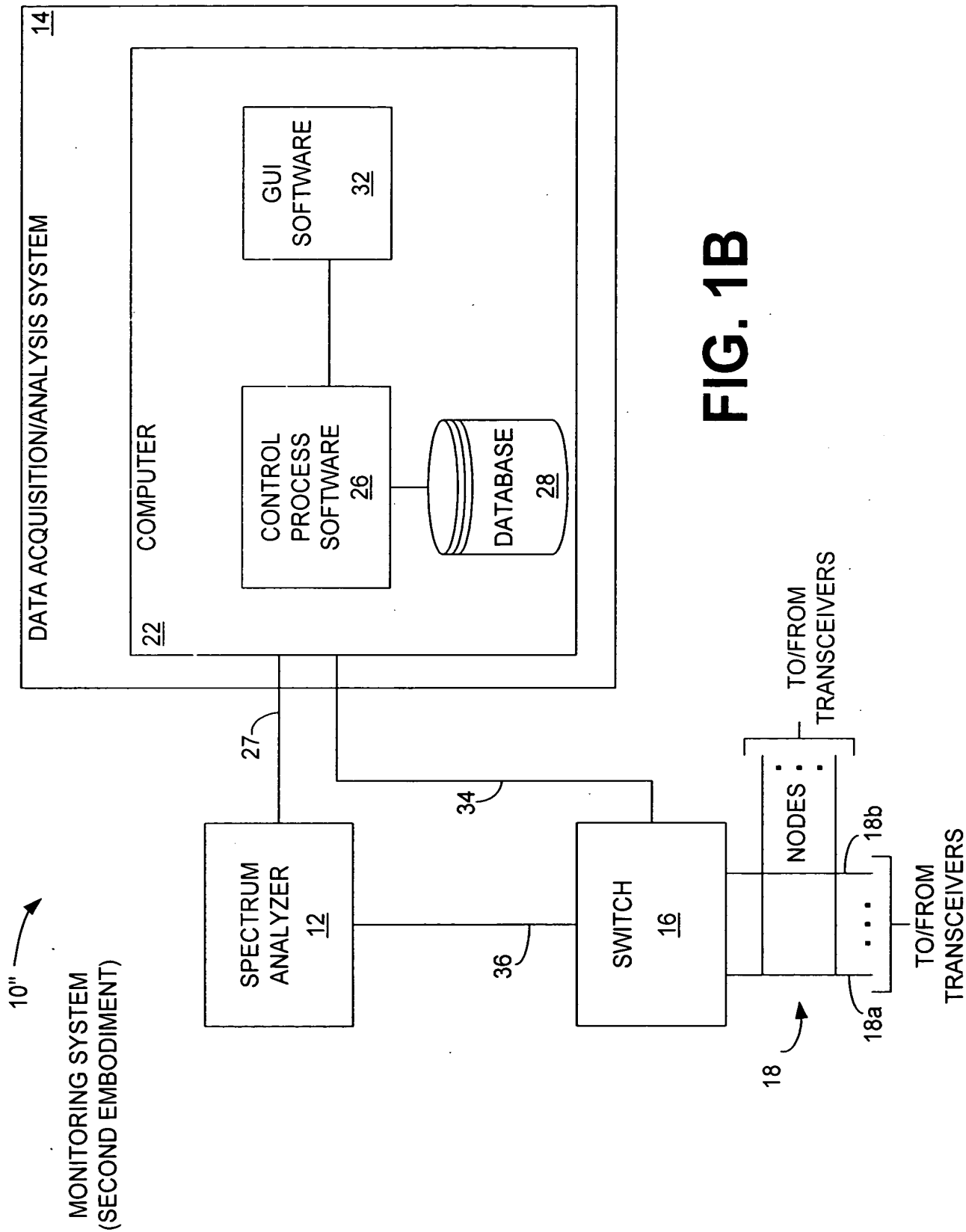
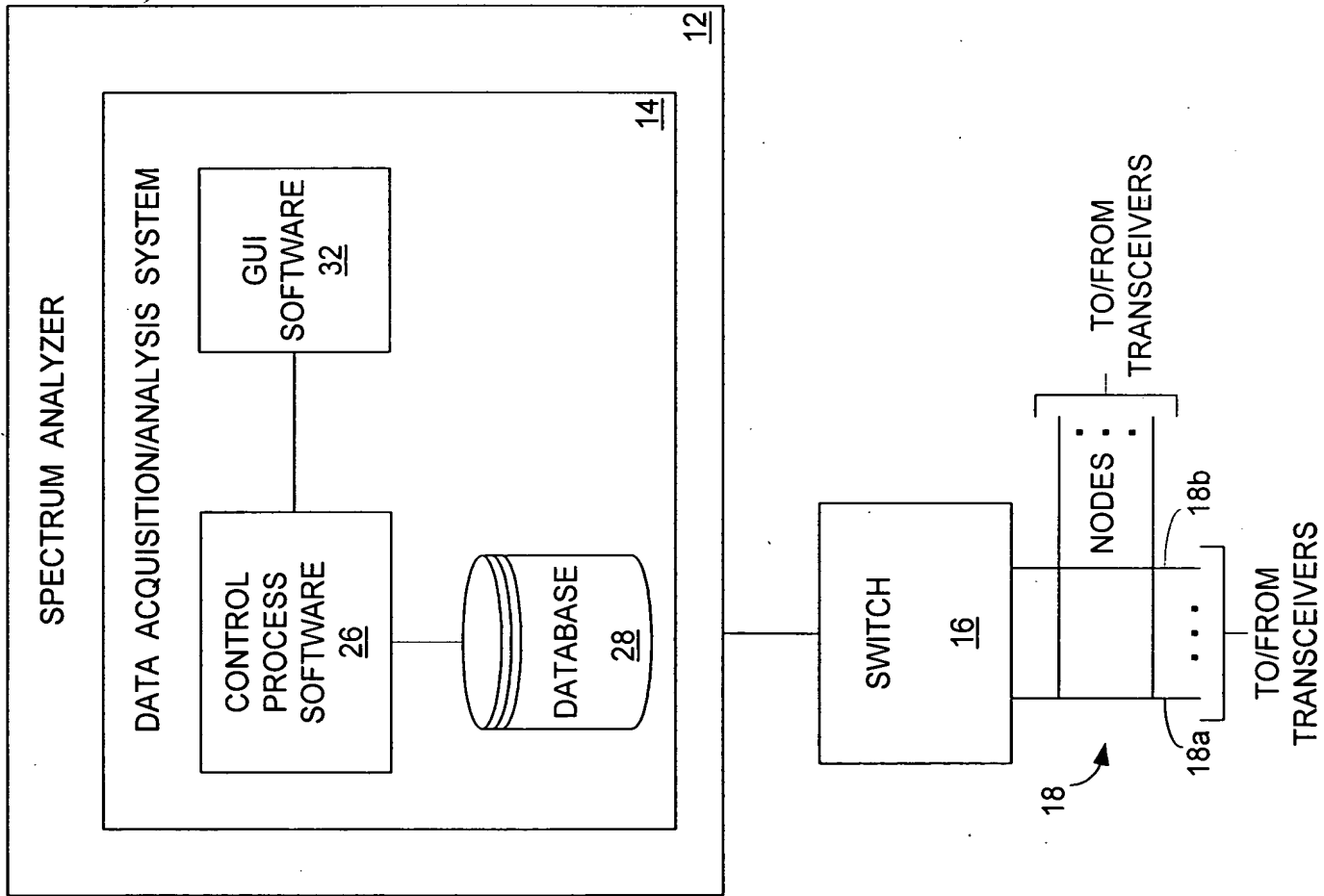


FIG. 1B



MONITORING SYSTEM  
(THIRD EMBODIMENT)

FIG. 1C

# DATA STRUCTURE OF DATABASE

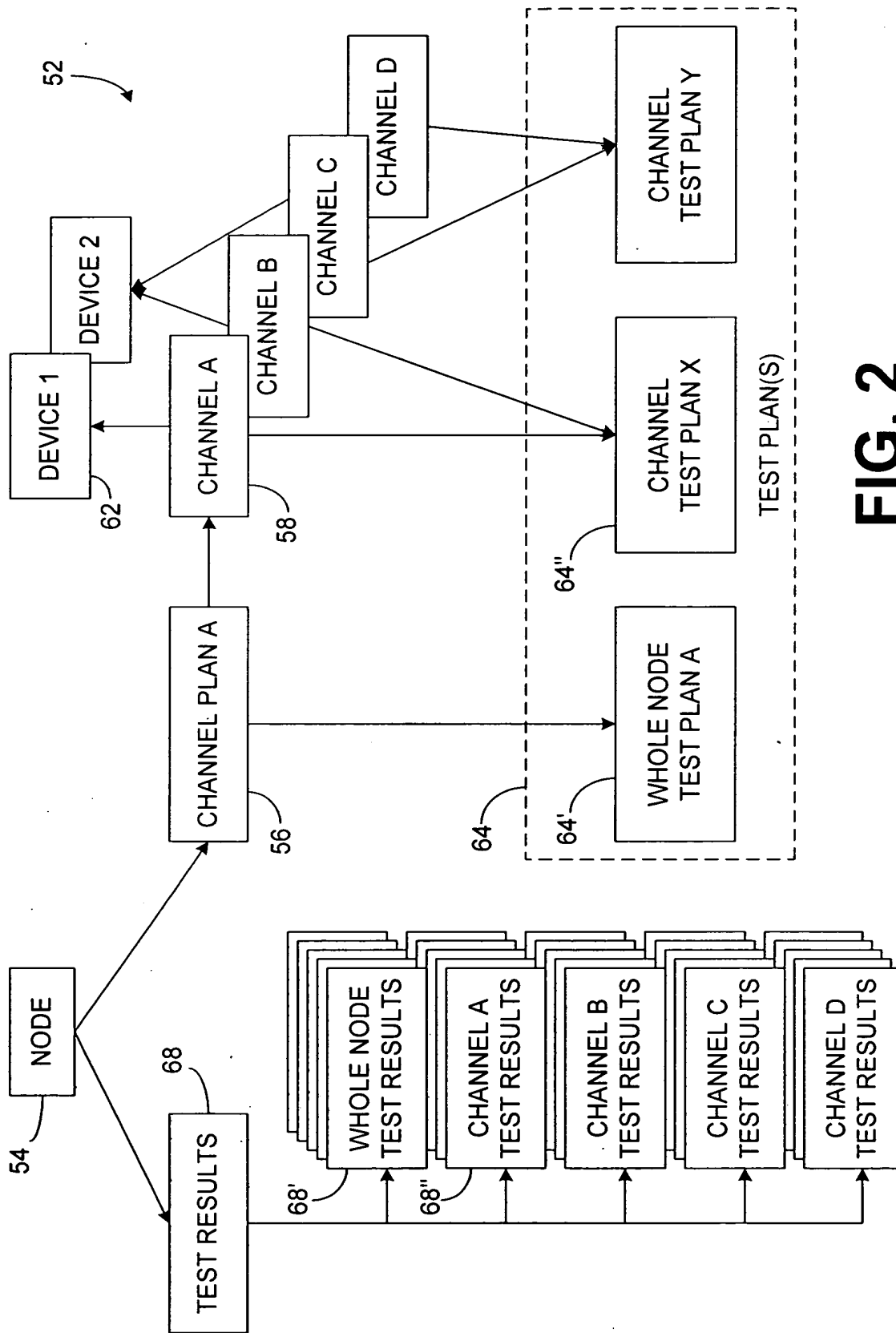


FIG. 2

# CHANNEL PLAN

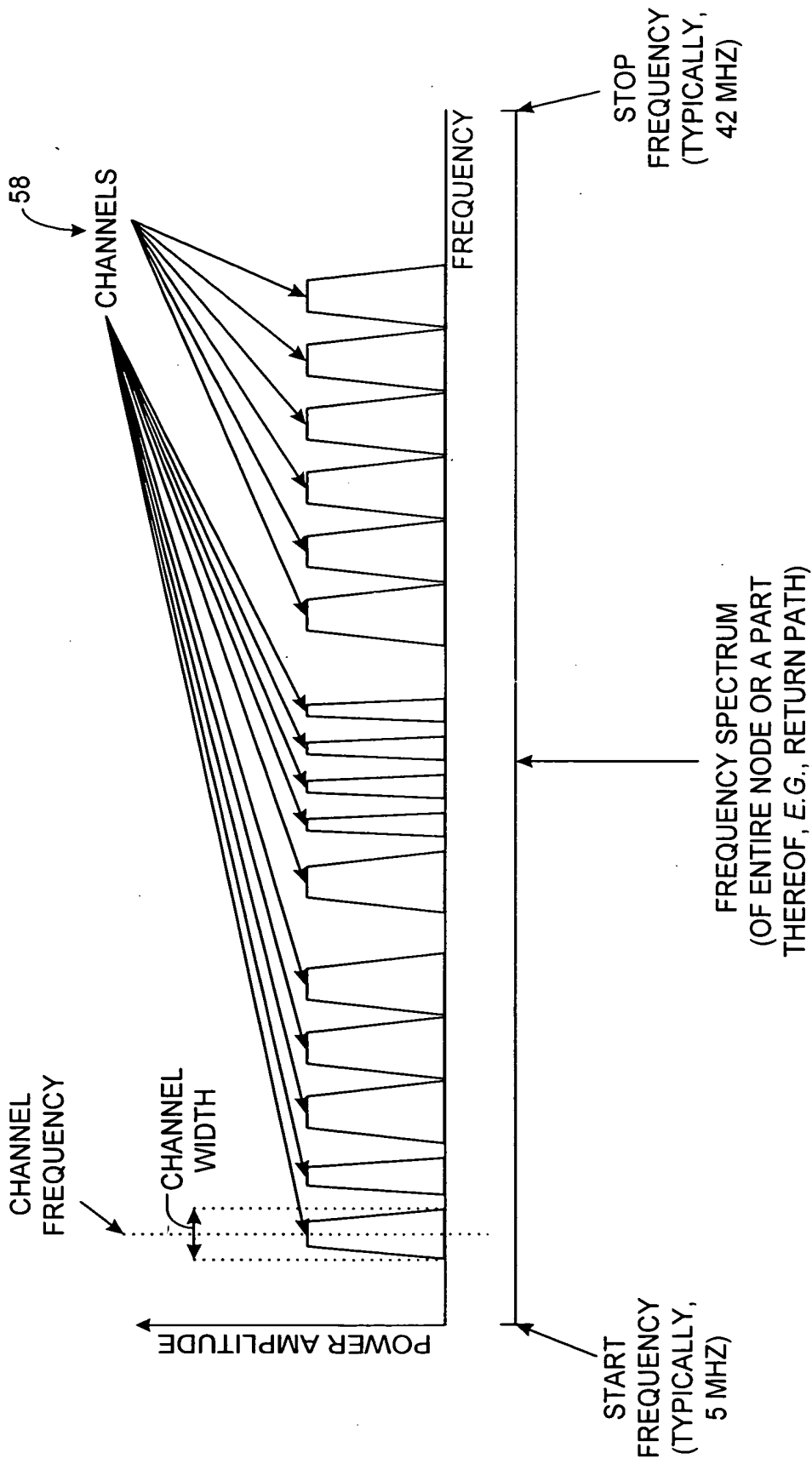
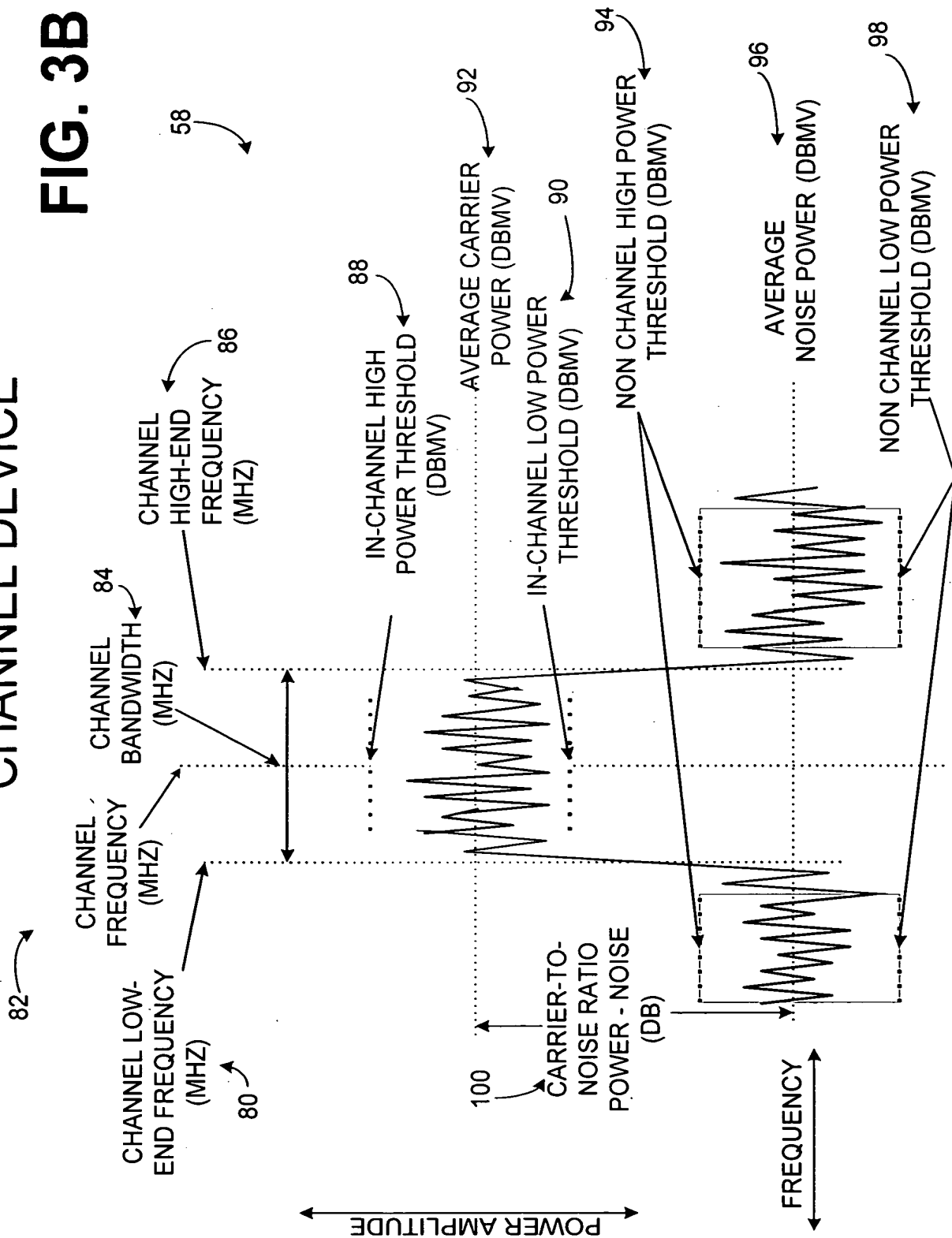


FIG. 3A

# CHANNEL DEVICE

FIG. 3B



# TEST PLAN

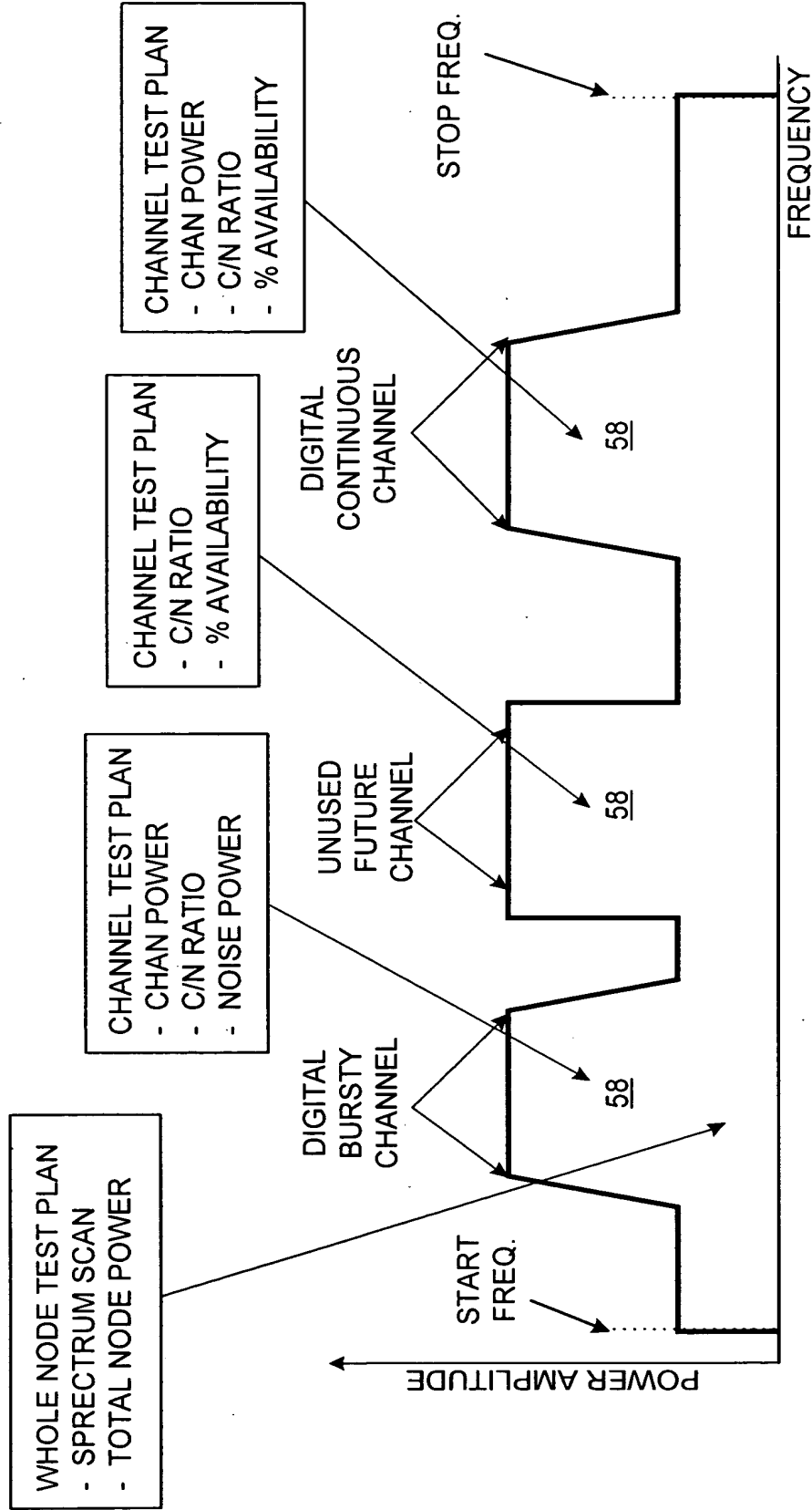


FIG. 3C

# SPECTRUM SCAN TEST (WHOLE NODE)

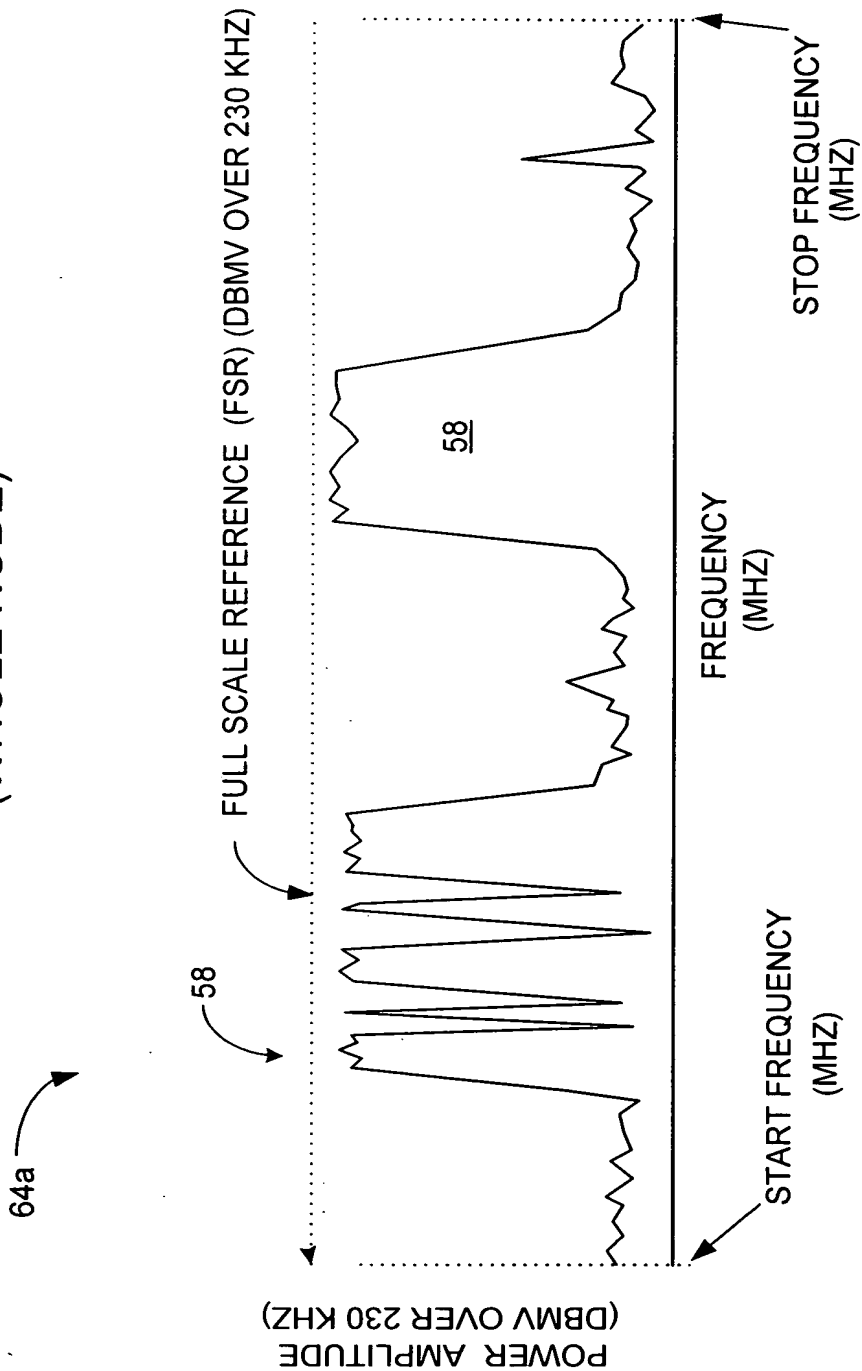


FIG. 3D

# SPECTRUM SCAN TEST (ALARM LIMITS)

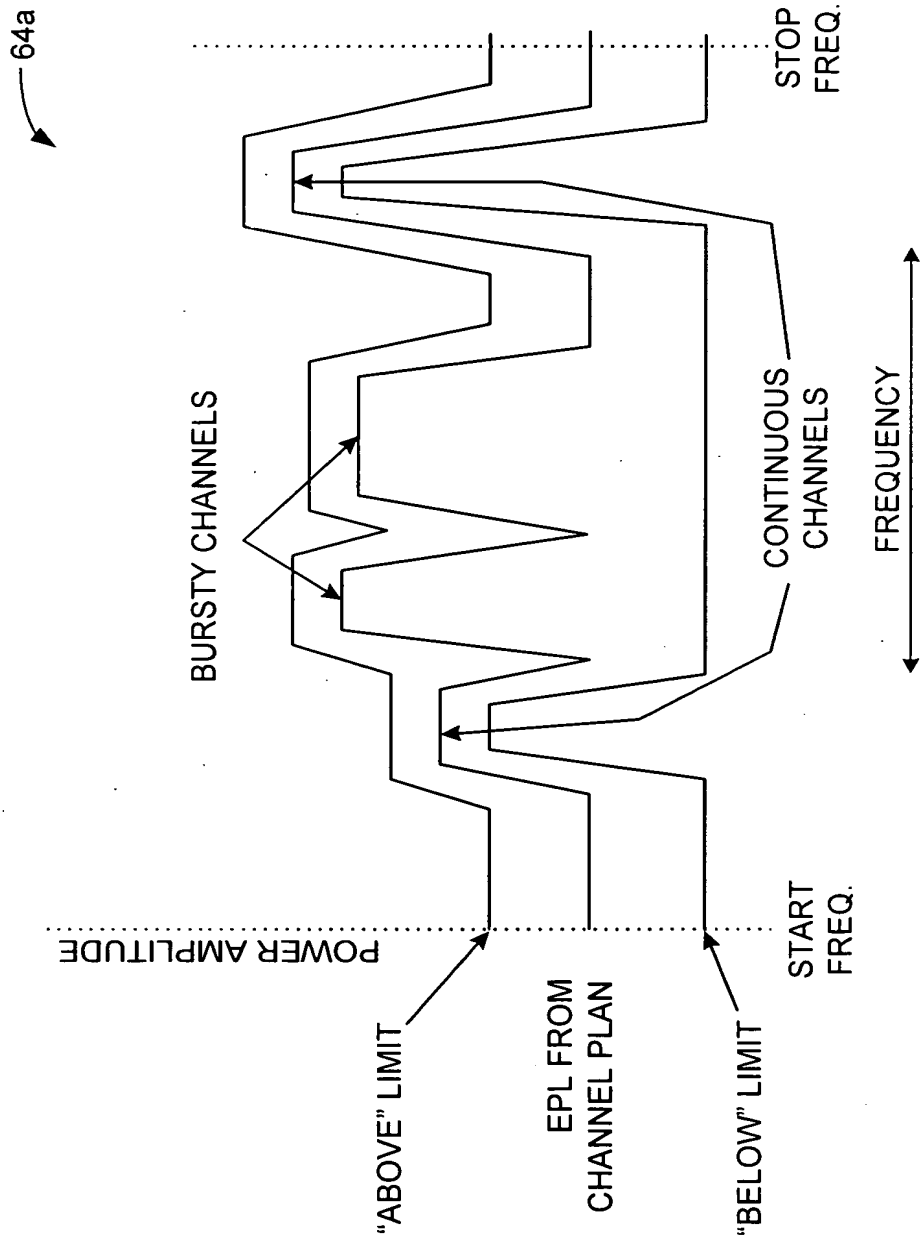


FIG. 3E

# TOTAL NODE POWER TEST (WHOLE NODE)

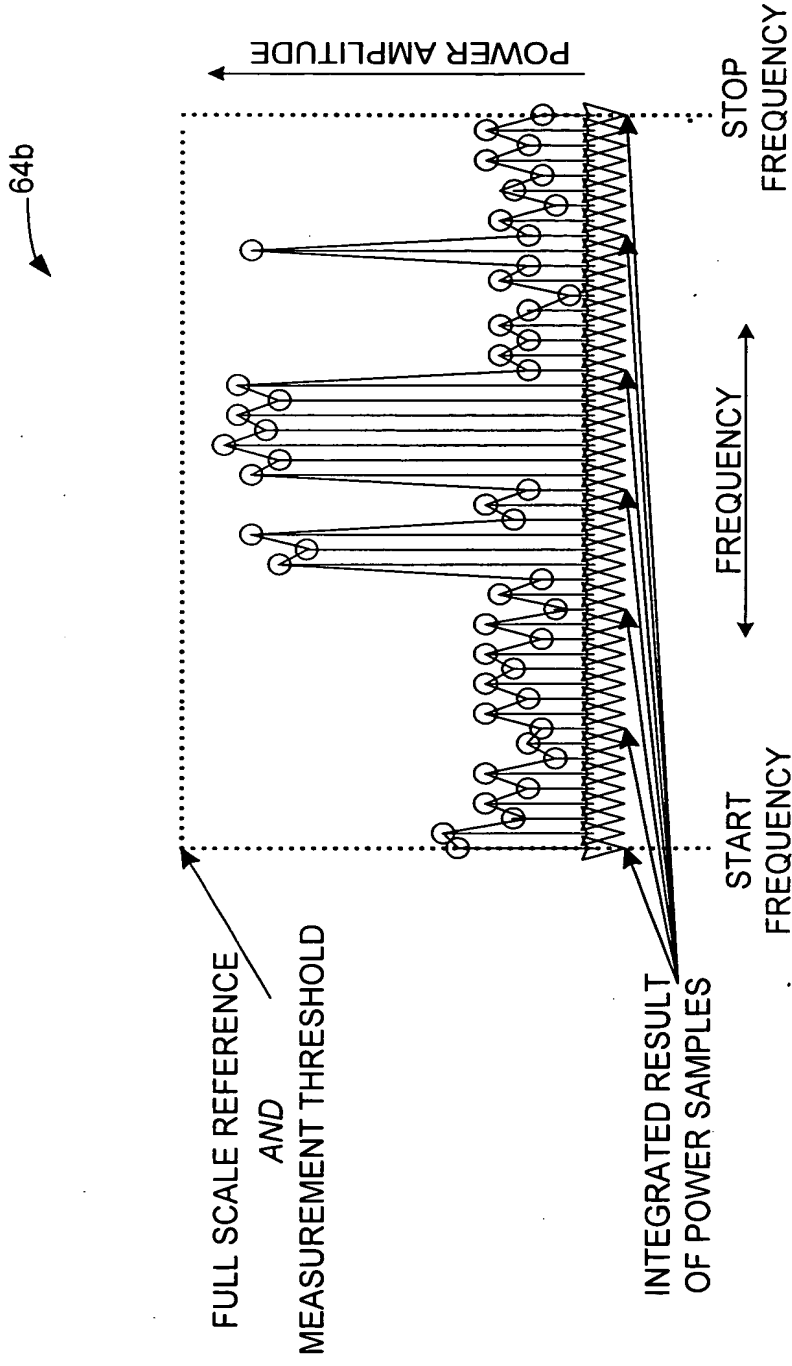


FIG. 3F

# AVERAGE NOISE POWER TEST (CHANNEL)

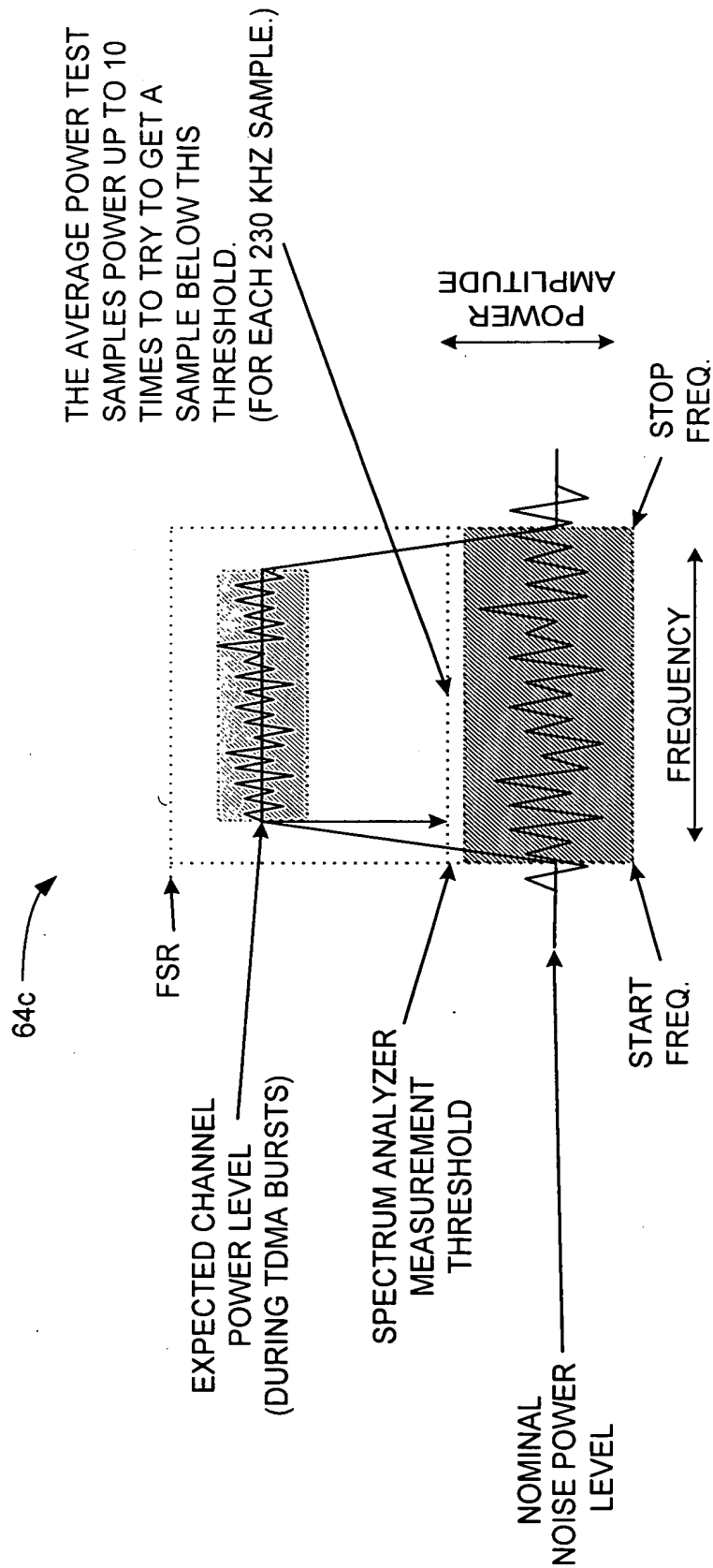


FIG. 3G



# CHANNEL POWER TEST (CHANNEL)

64d

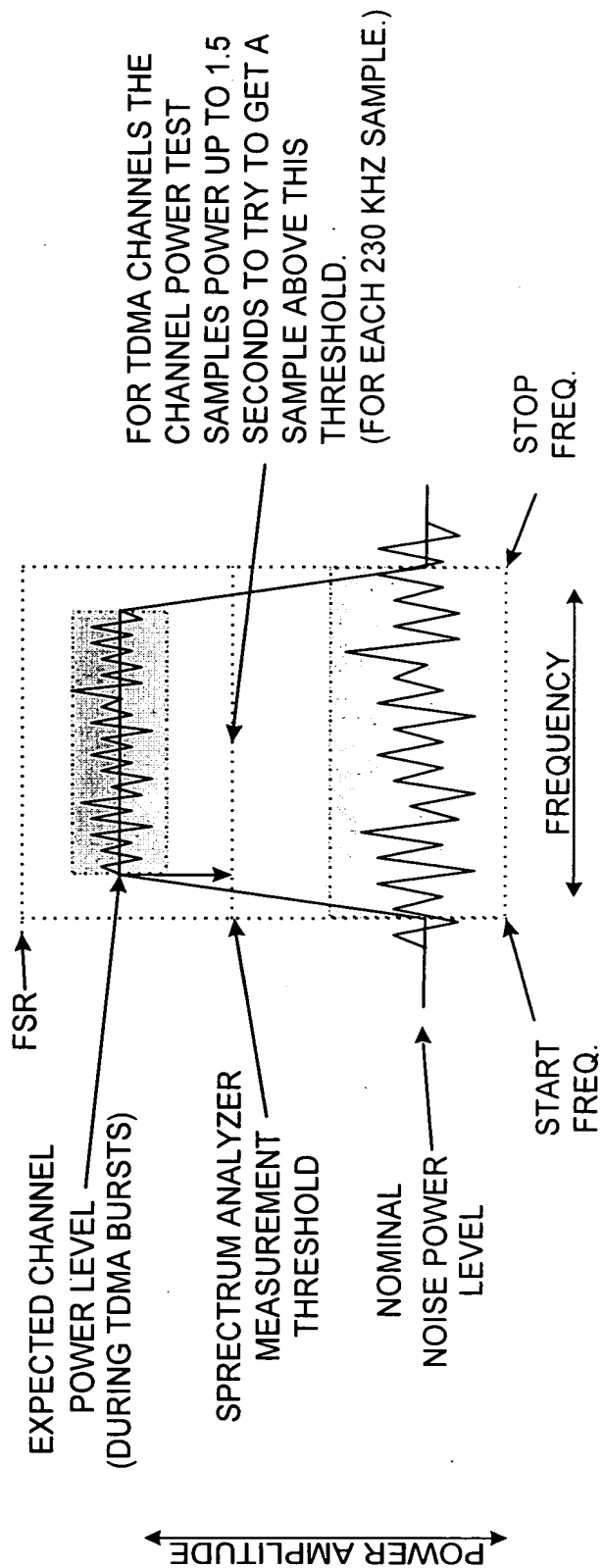
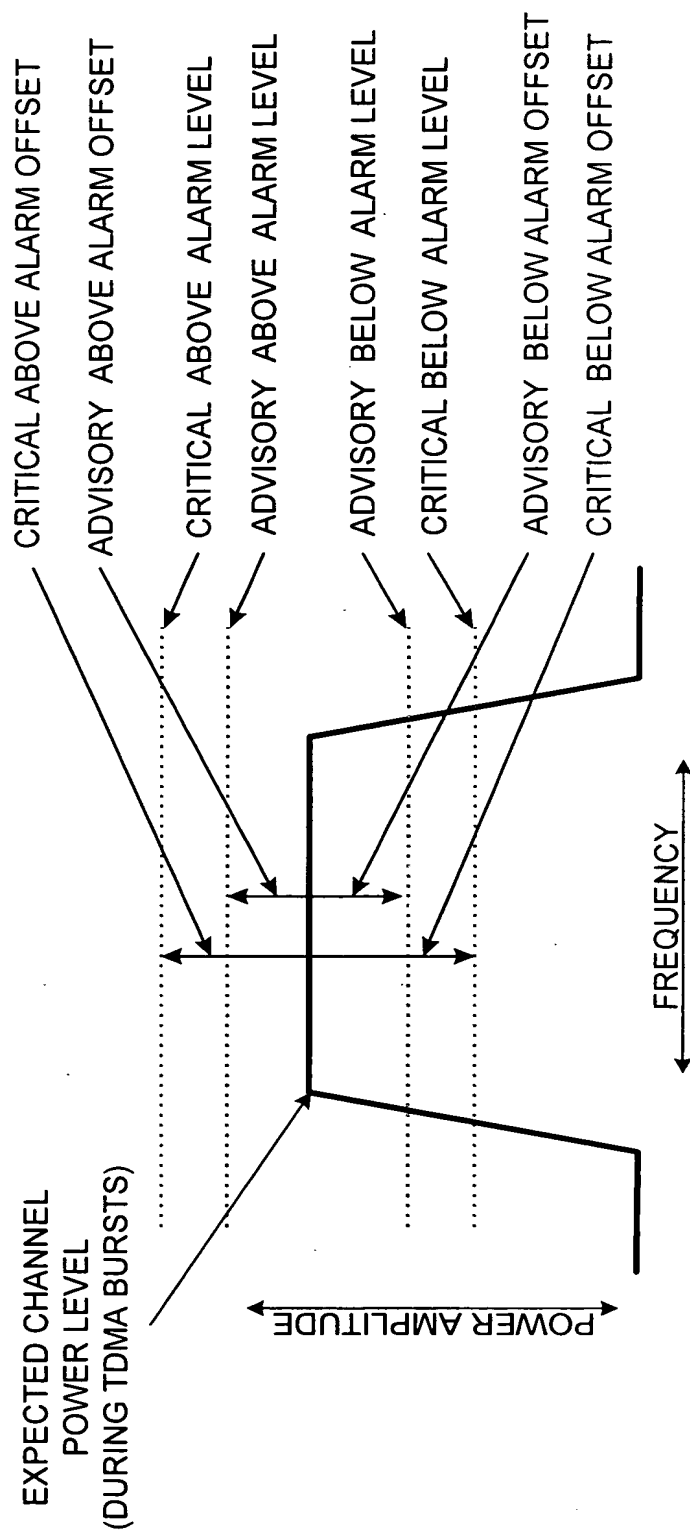


FIG. 3I

# CHANNEL POWER TEST (ALARM LIMITS)

64d



# FIG. 3J

# CHANNEL POWER TEST (TDMA BURSTS)

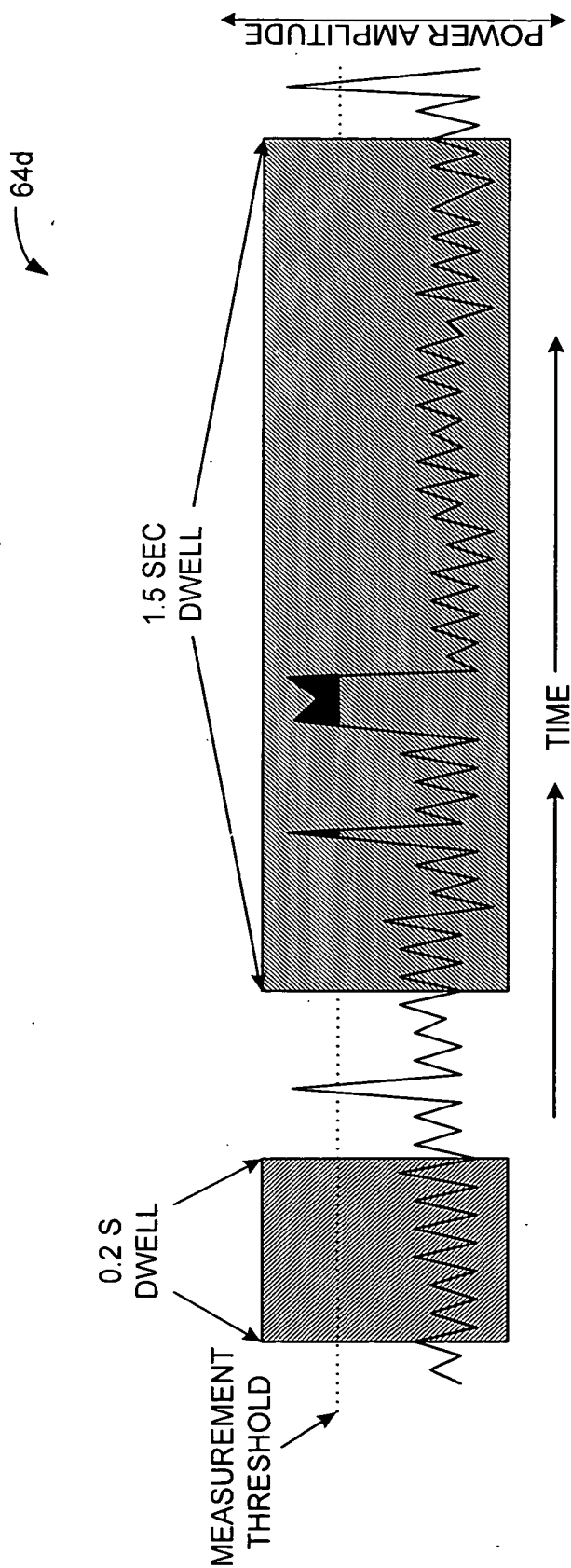
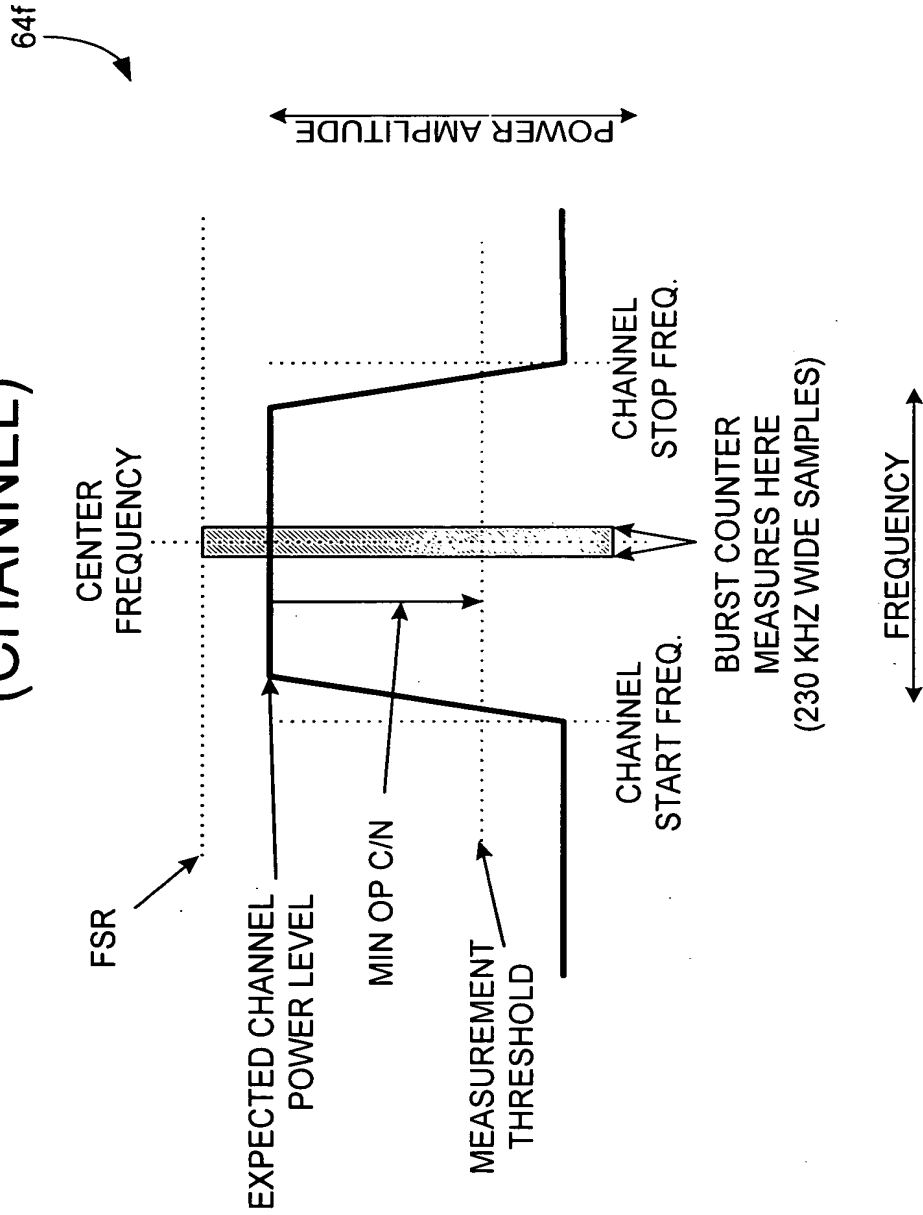


FIG. 3K



# BURST COUNTER TEST (CHANNEL)



**FIG. 3M**

# PERCENT AVAILABILITY TEST (CHANNEL)

64g

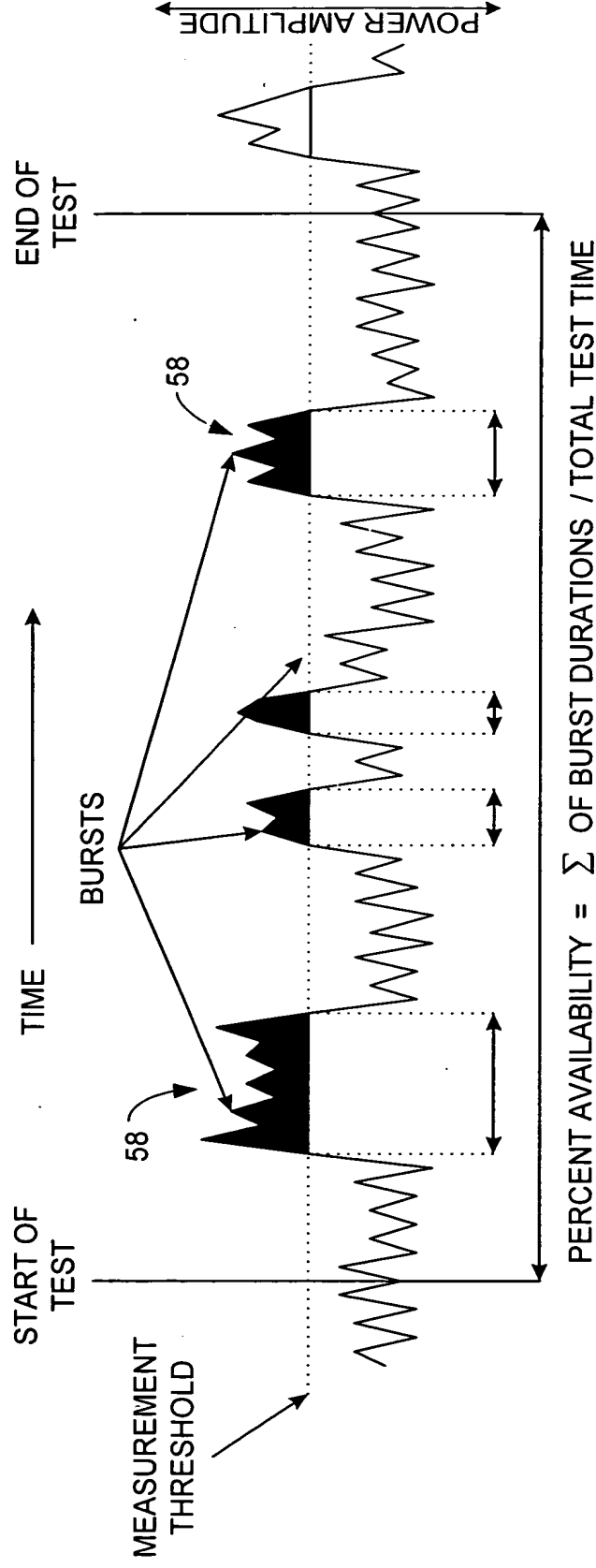


FIG. 3N

# PERCENT AVAILABILITY TEST (ACTIVE CHANNELS)

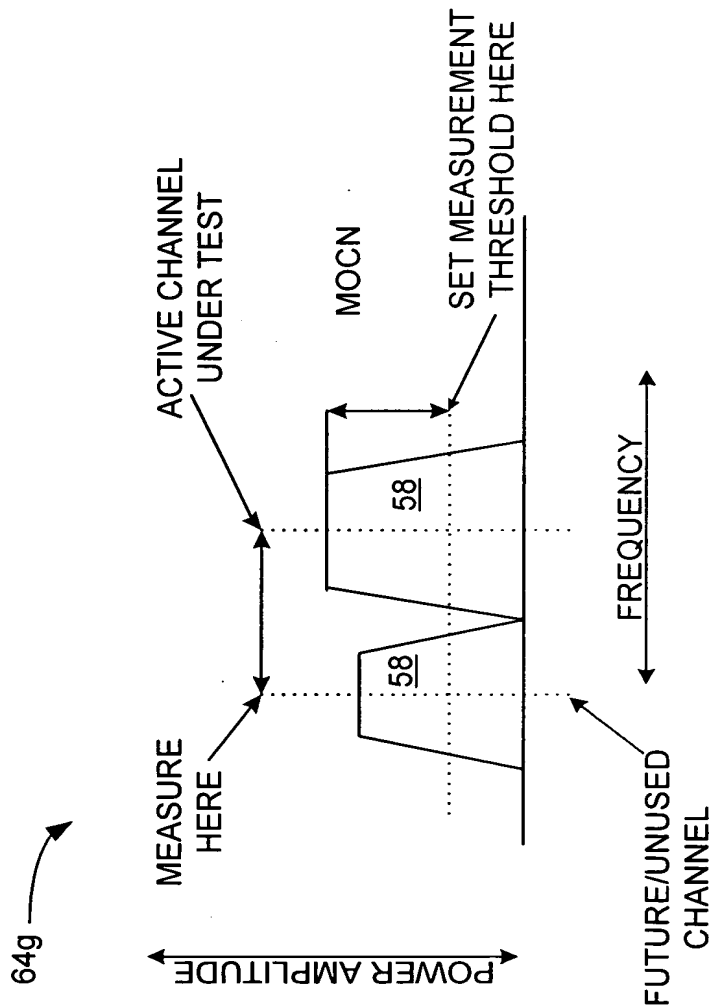


FIG. 30

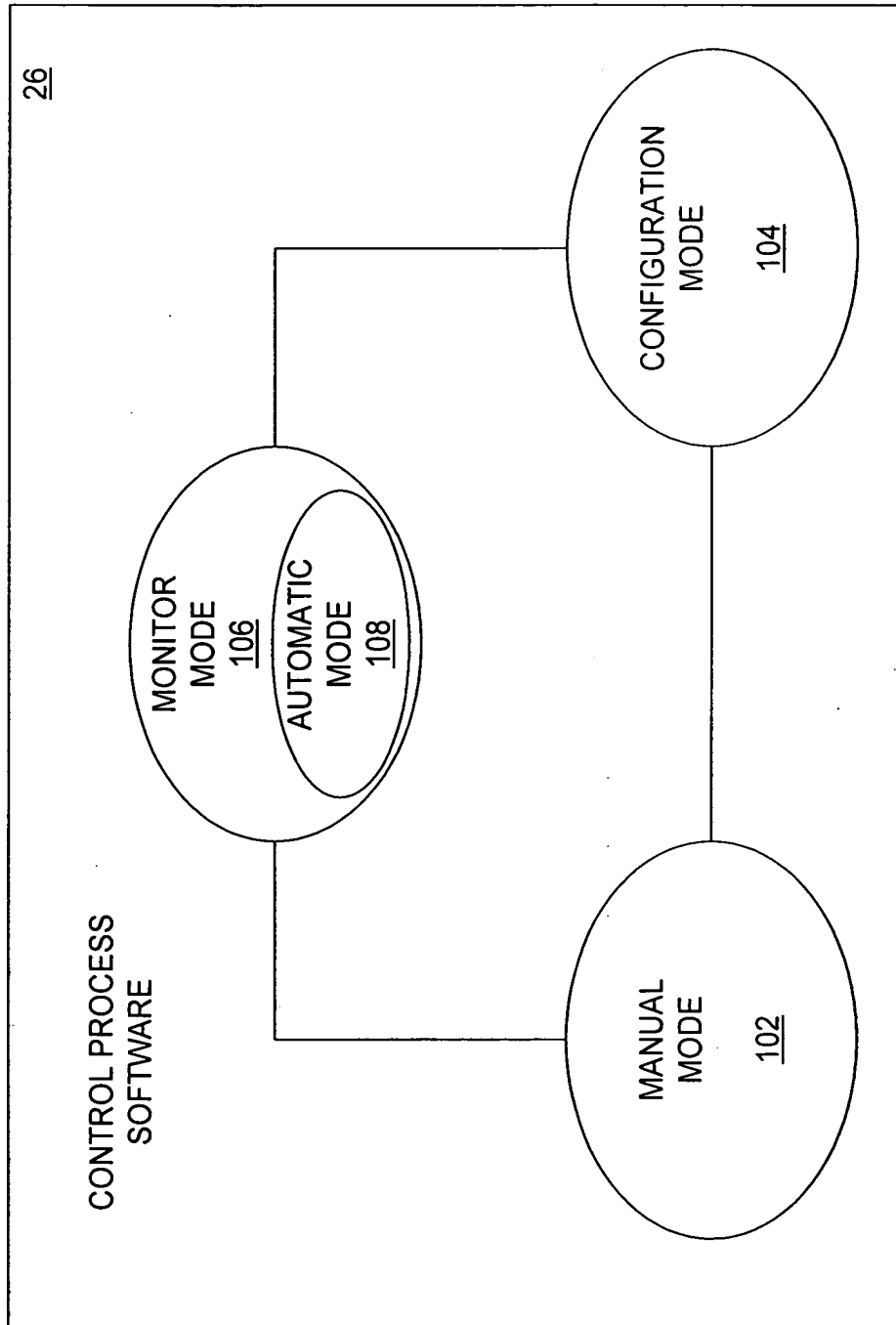
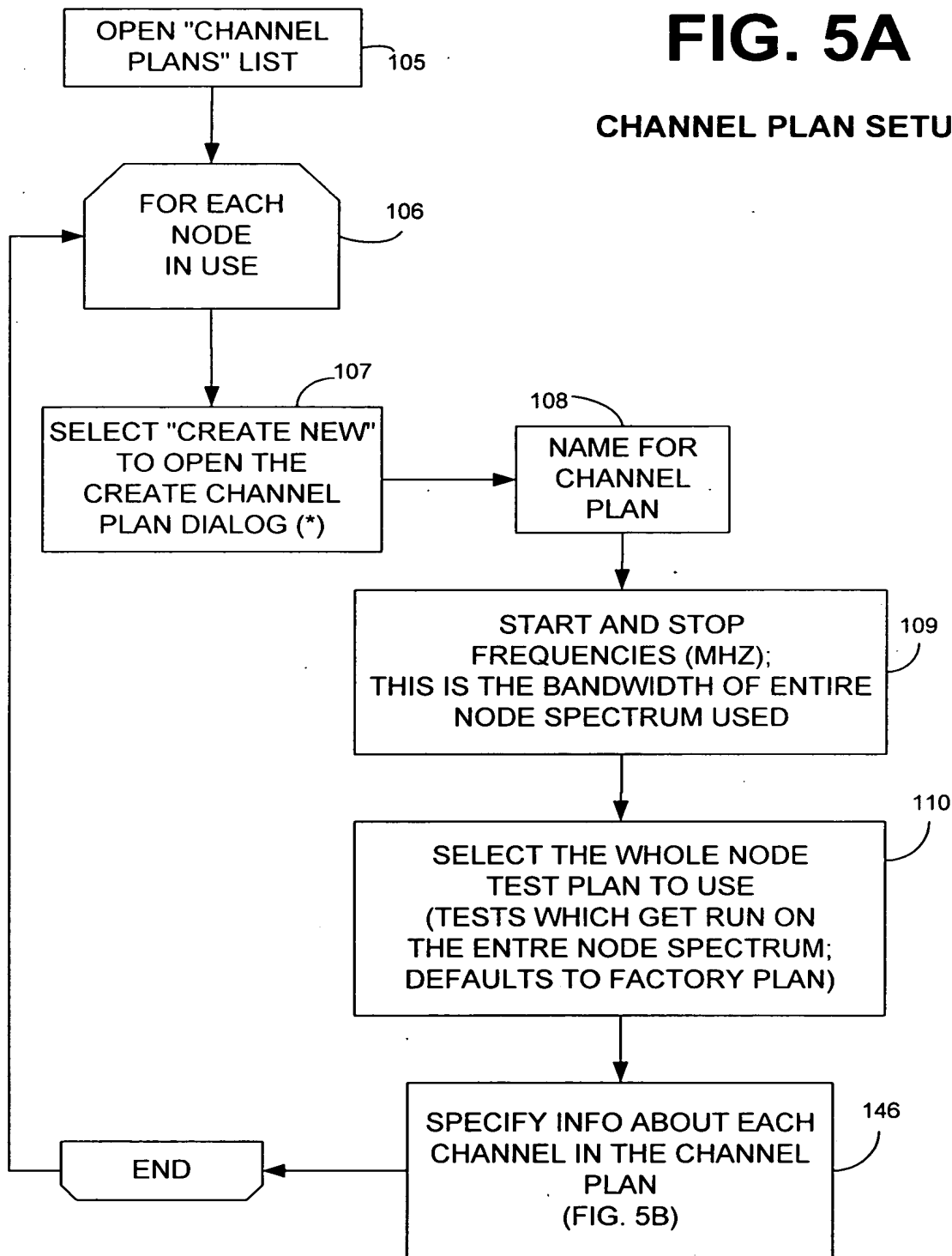


FIG. 4

# FIG. 5A

## CHANNEL PLAN SETUP

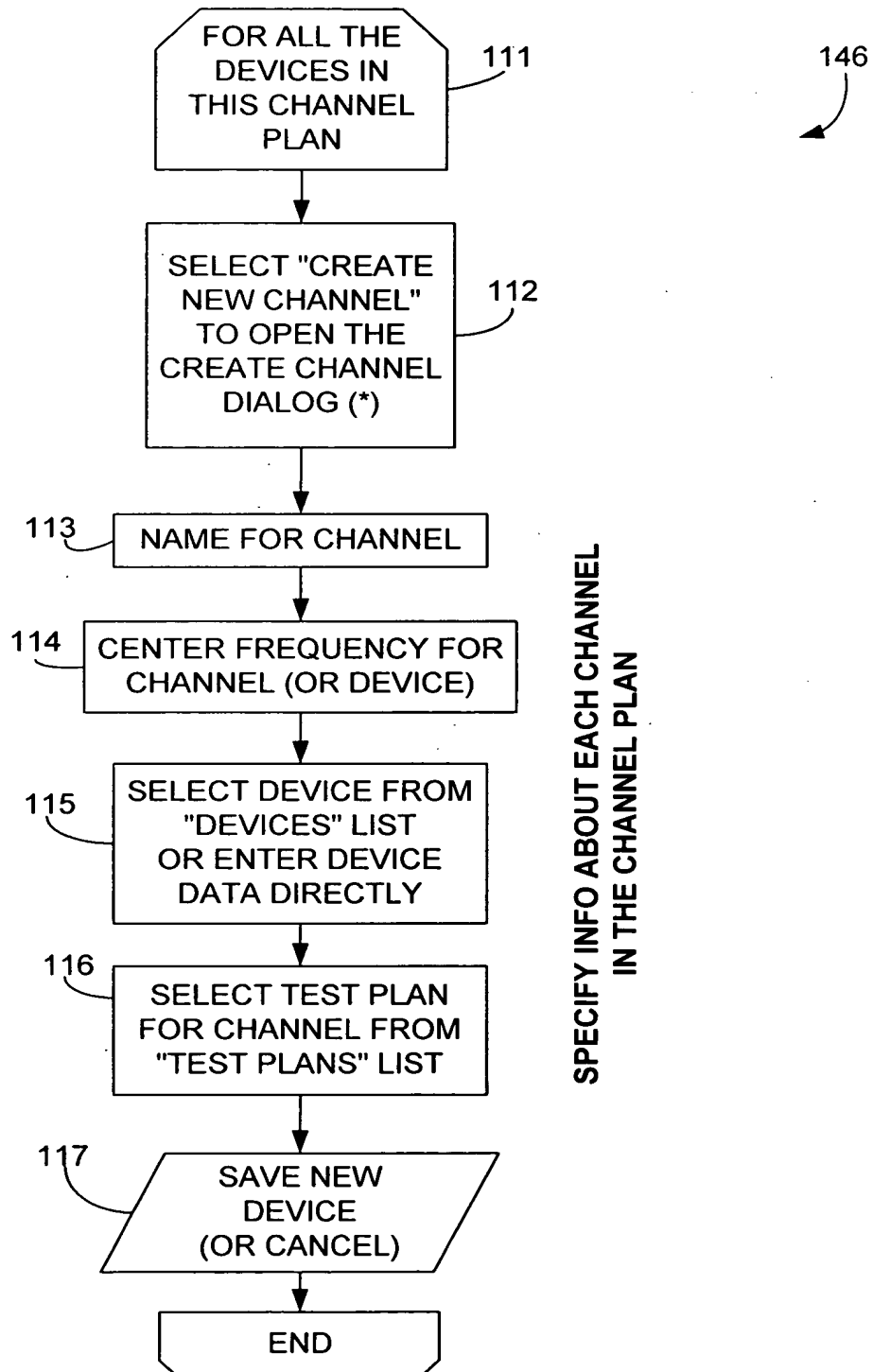


SPECIFY GENERAL INFO ABOUT CHANNEL PLAN

FIG. 5A

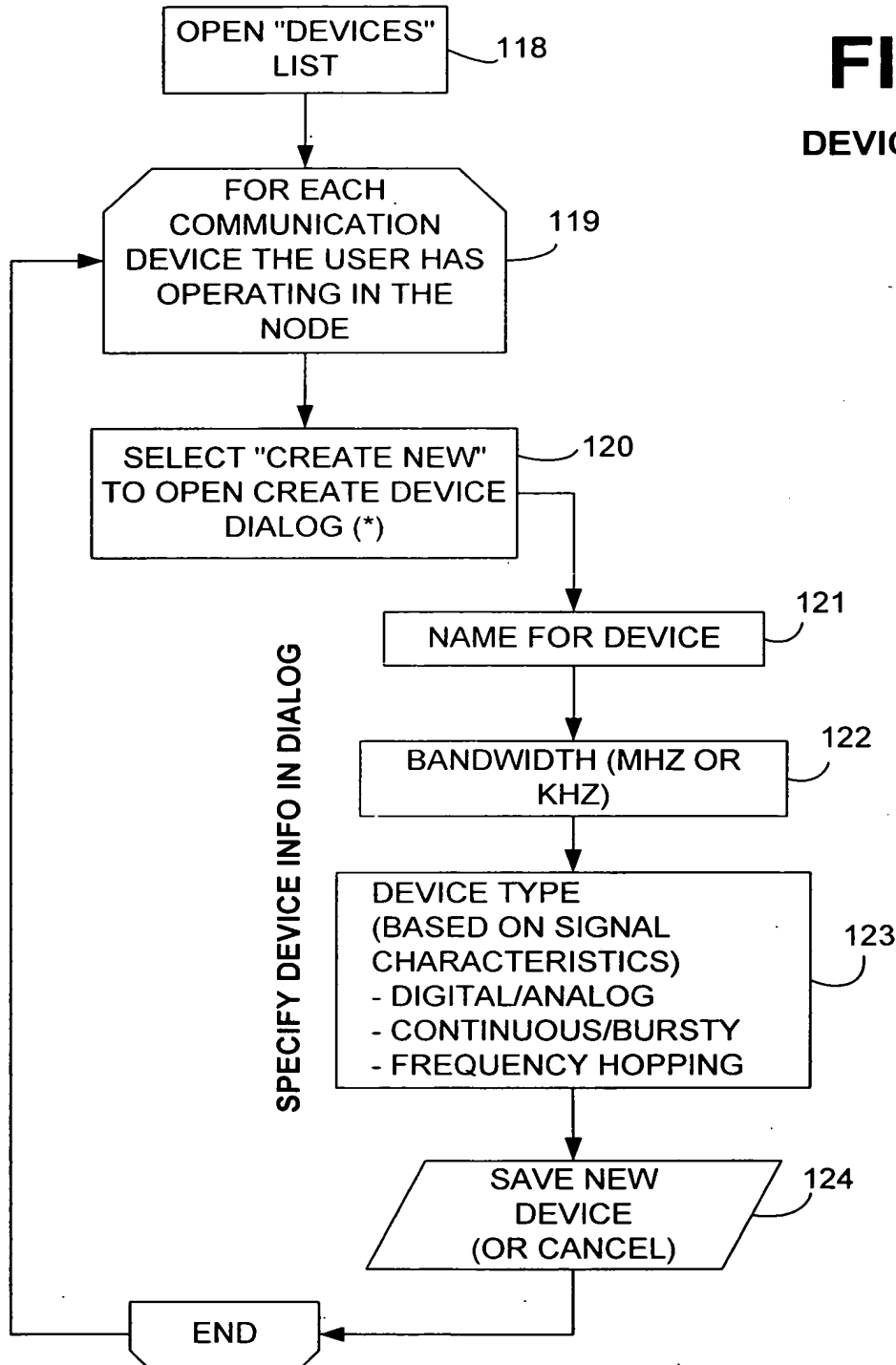
# FIG. 5B

## CHANNEL PLAN SETUP (CONTINUED)



# FIG. 6

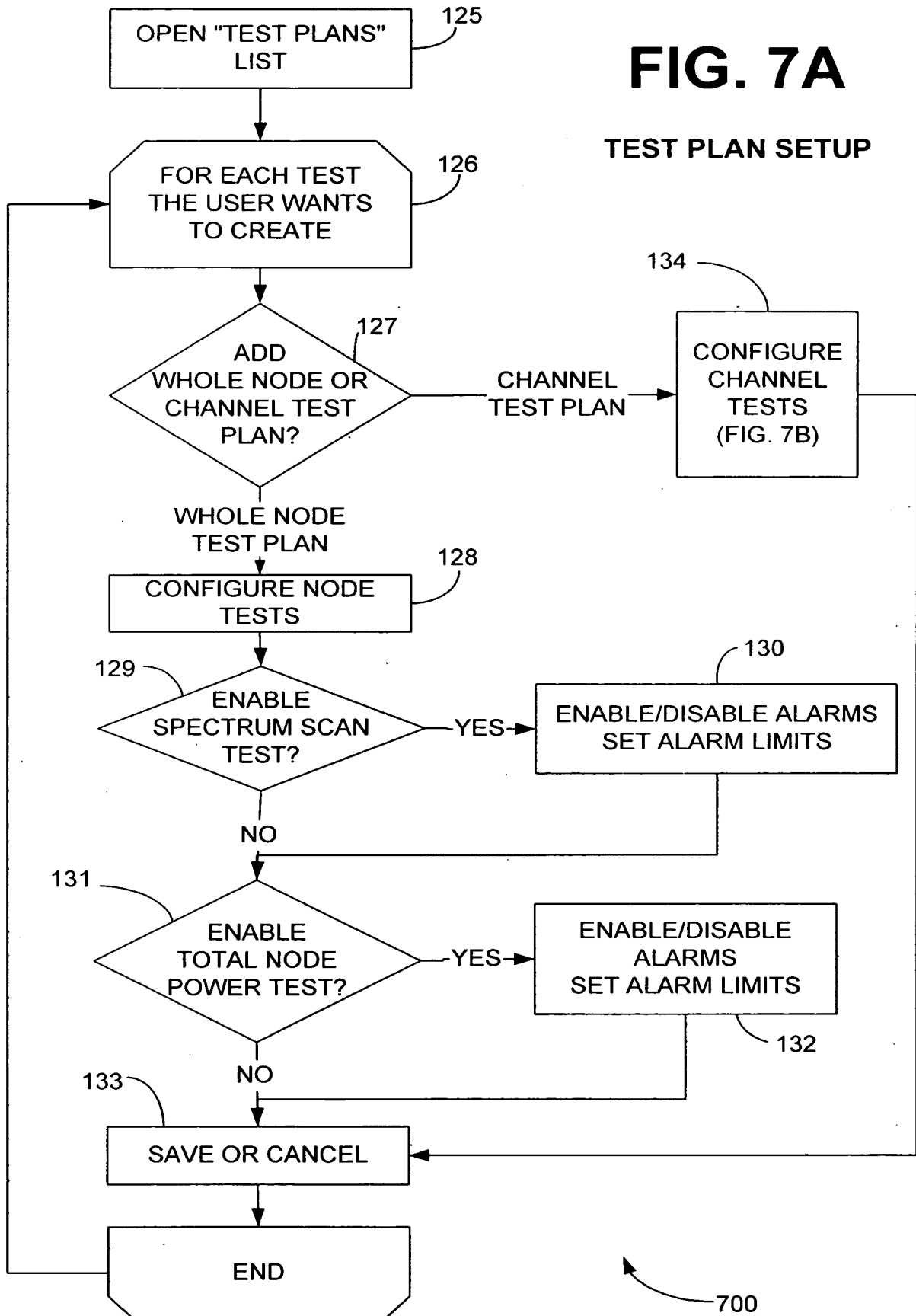
## DEVICE SETUP



\* NOTE: DEVICE LIST DIALOG ALSO  
ALLOWS USER TO EDIT OR DELETE  
DEVICES.

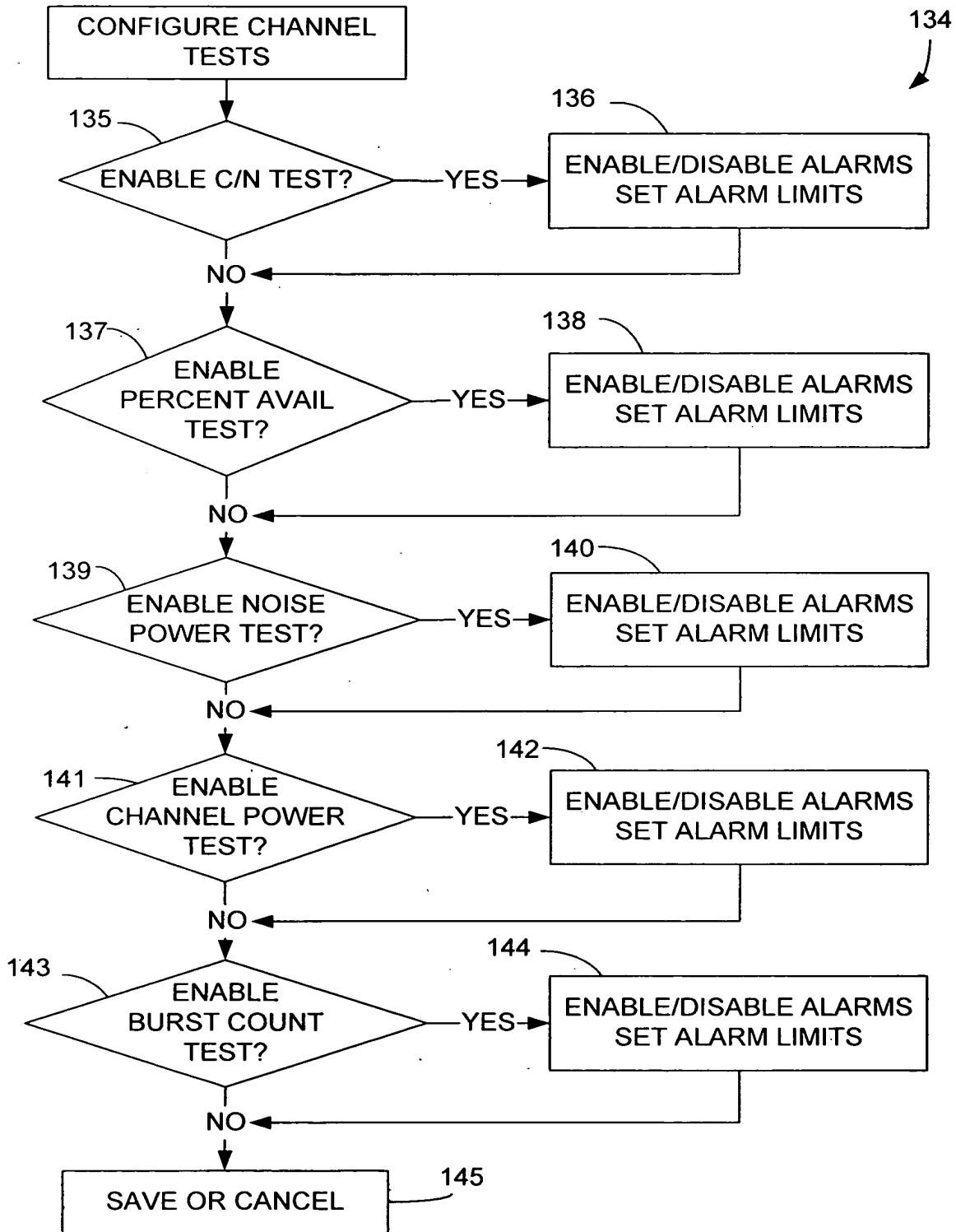
# FIG. 7A

## TEST PLAN SETUP



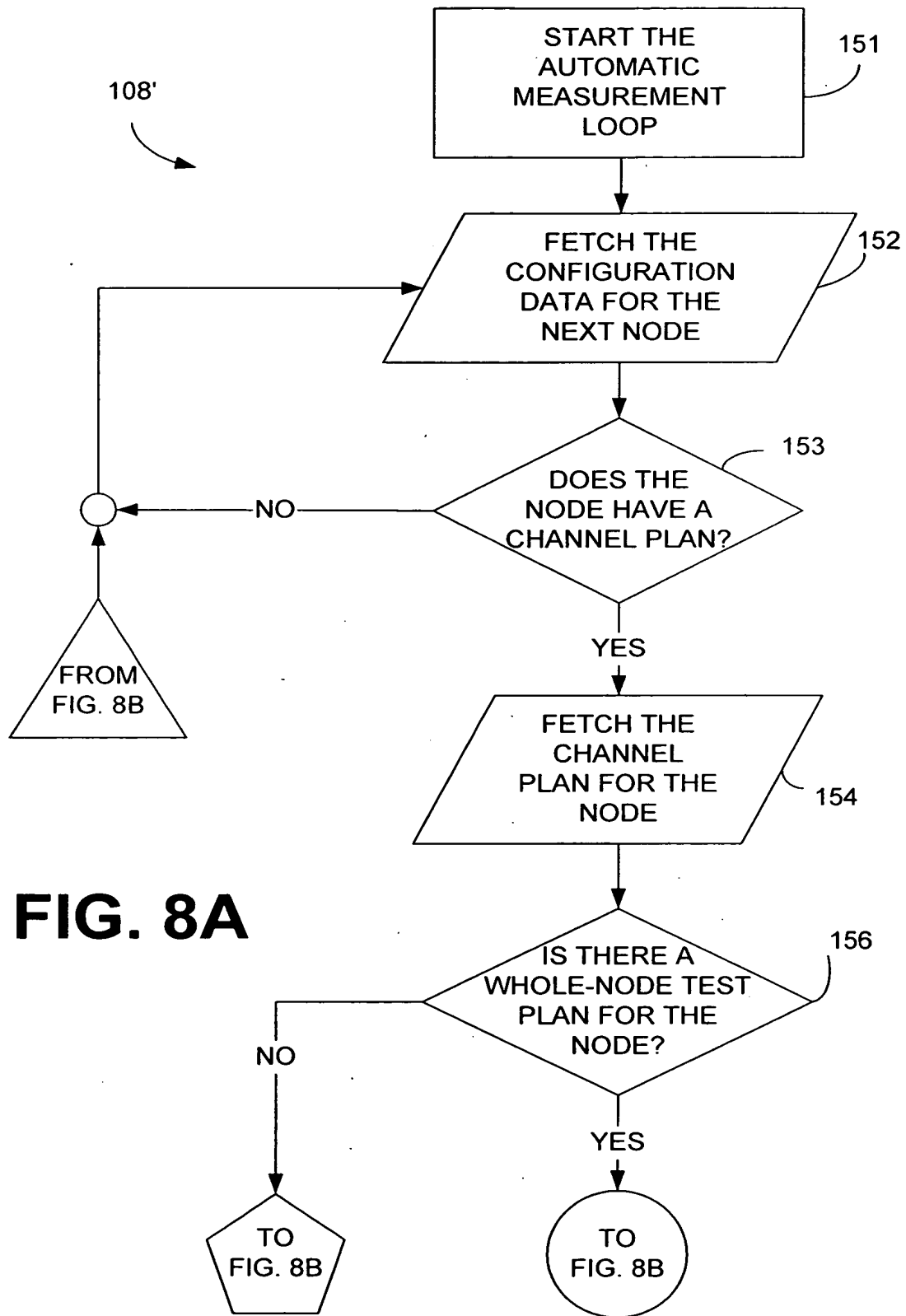
60021-09501160

## TEST PLAN SETUP (CONTINUED)



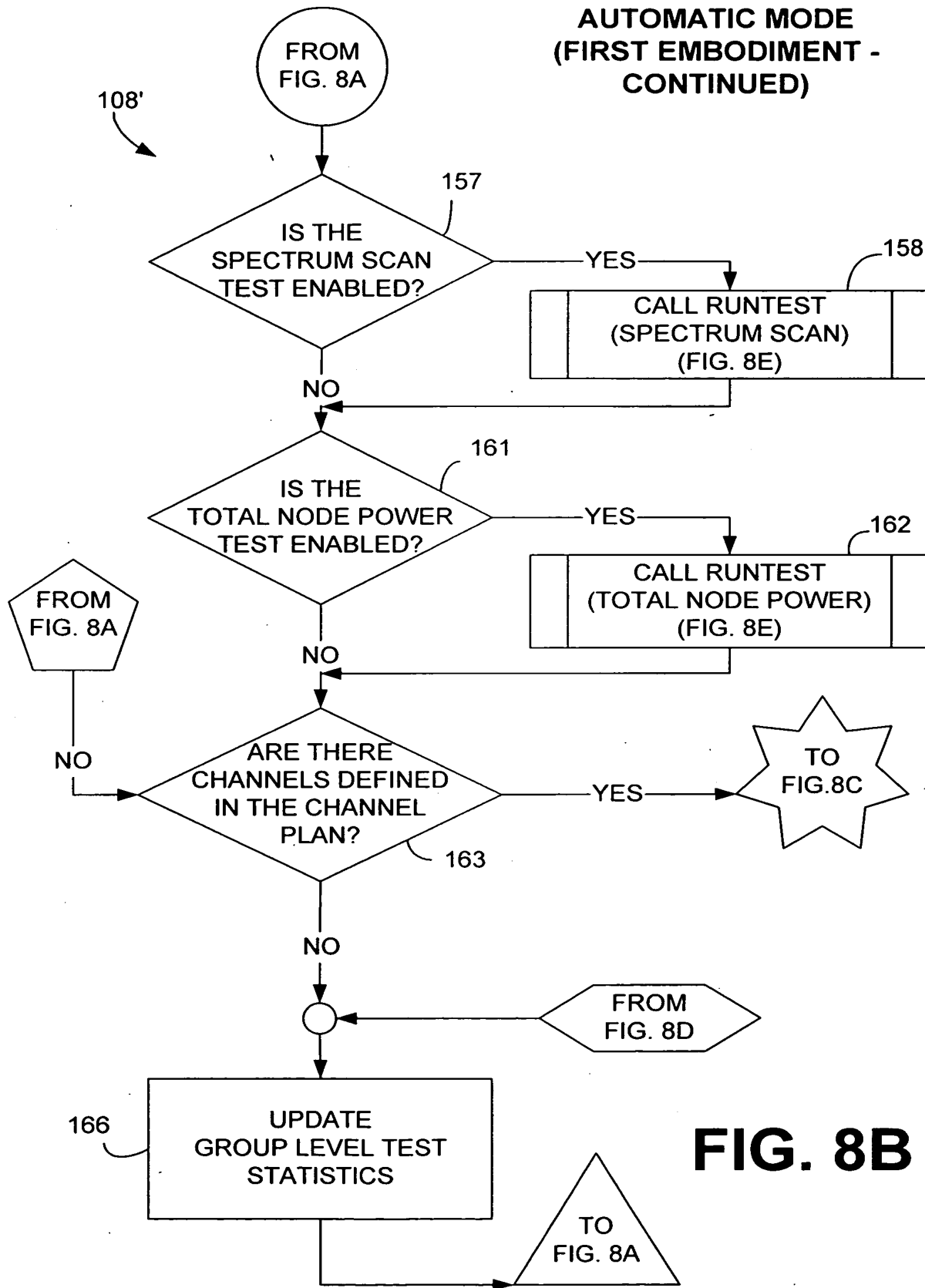
**FIG. 7B**

**AUTOMATIC MODE  
(FIRST EMBODIMENT; EMPLOYS ROUND ROBIN ALGORITHM)**



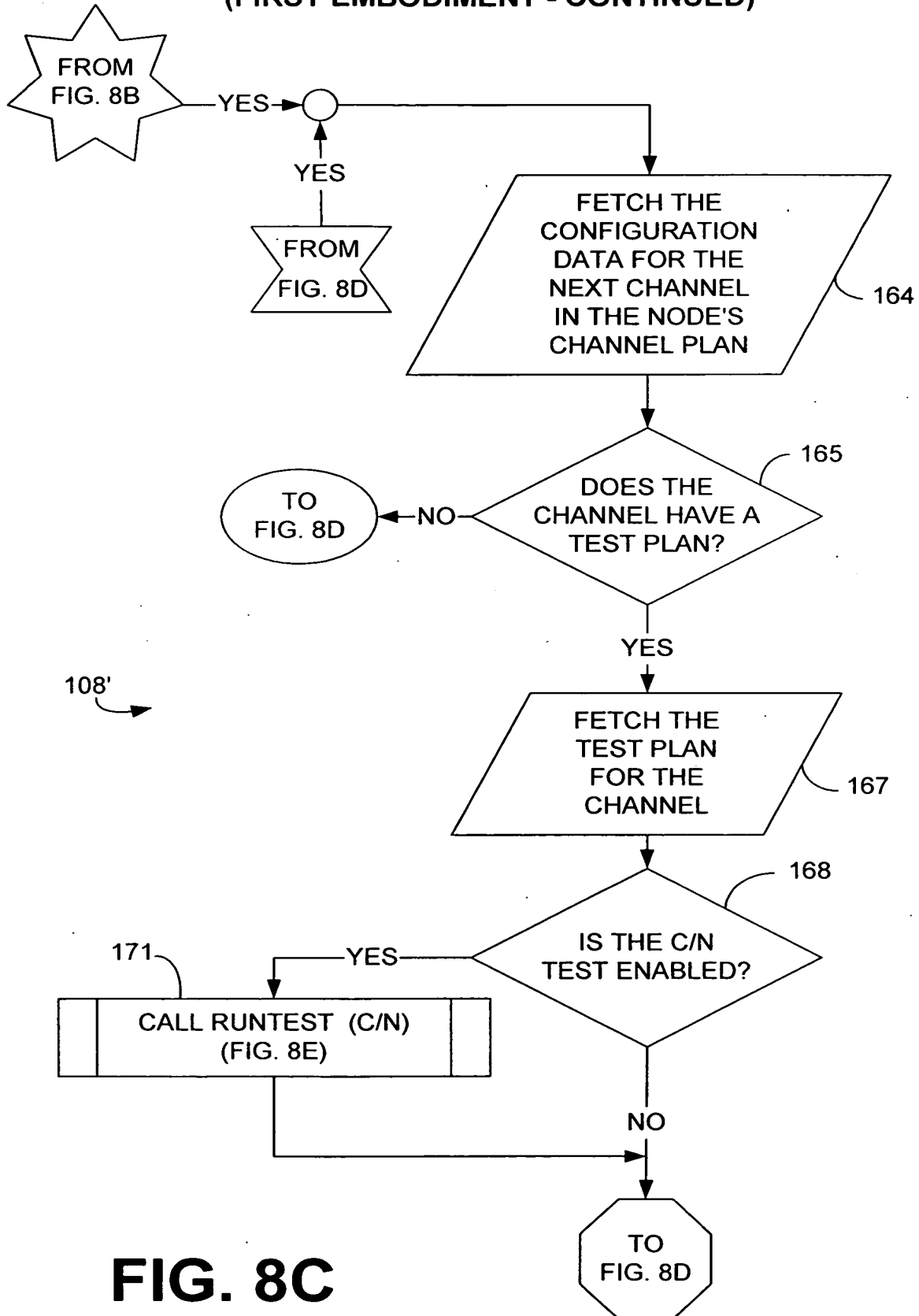
**FIG. 8A**

**AUTOMATIC MODE  
(FIRST EMBODIMENT -  
CONTINUED)**



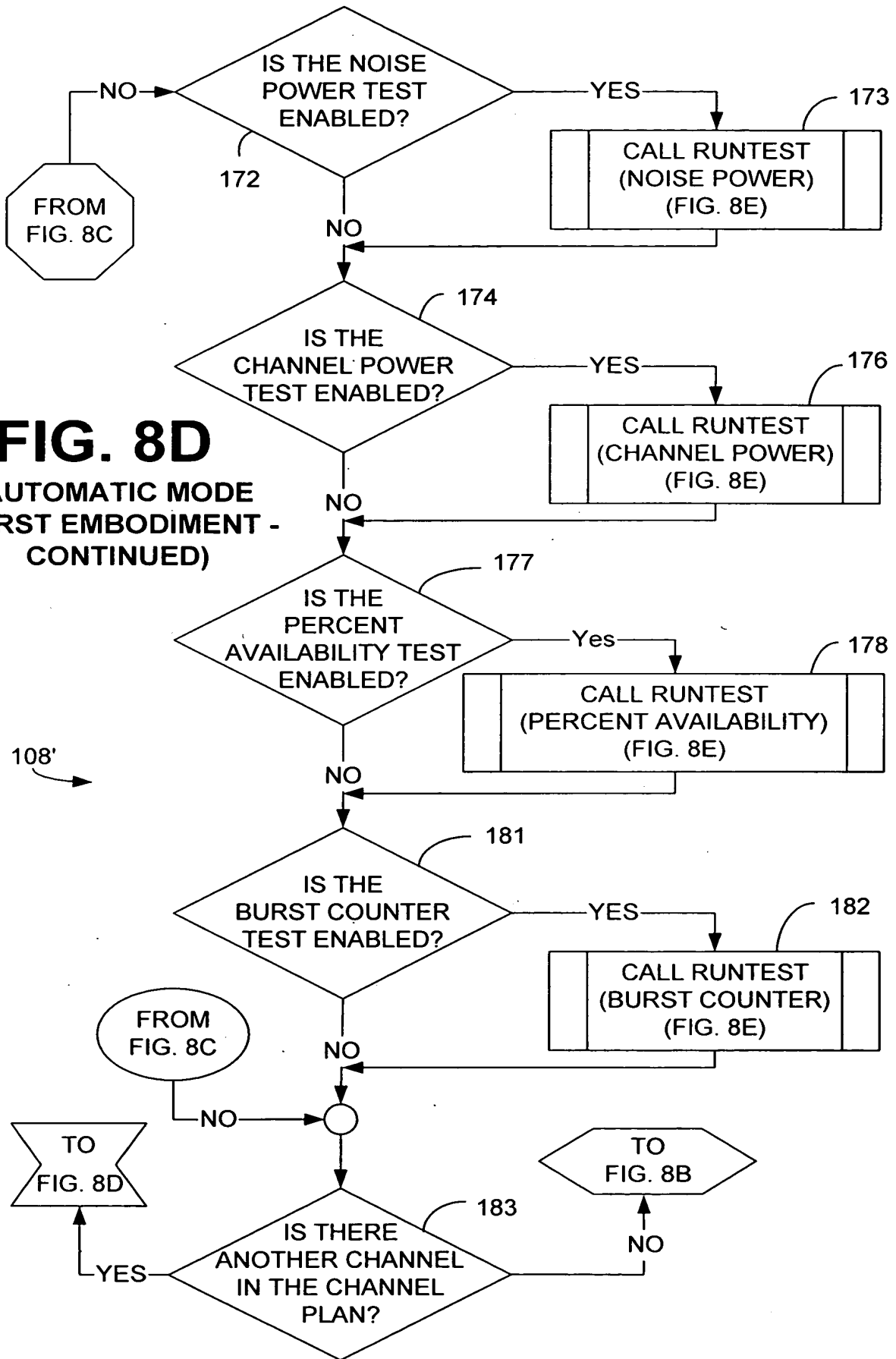
**FIG. 8B**

**AUTOMATIC MODE  
(FIRST EMBODIMENT - CONTINUED)**



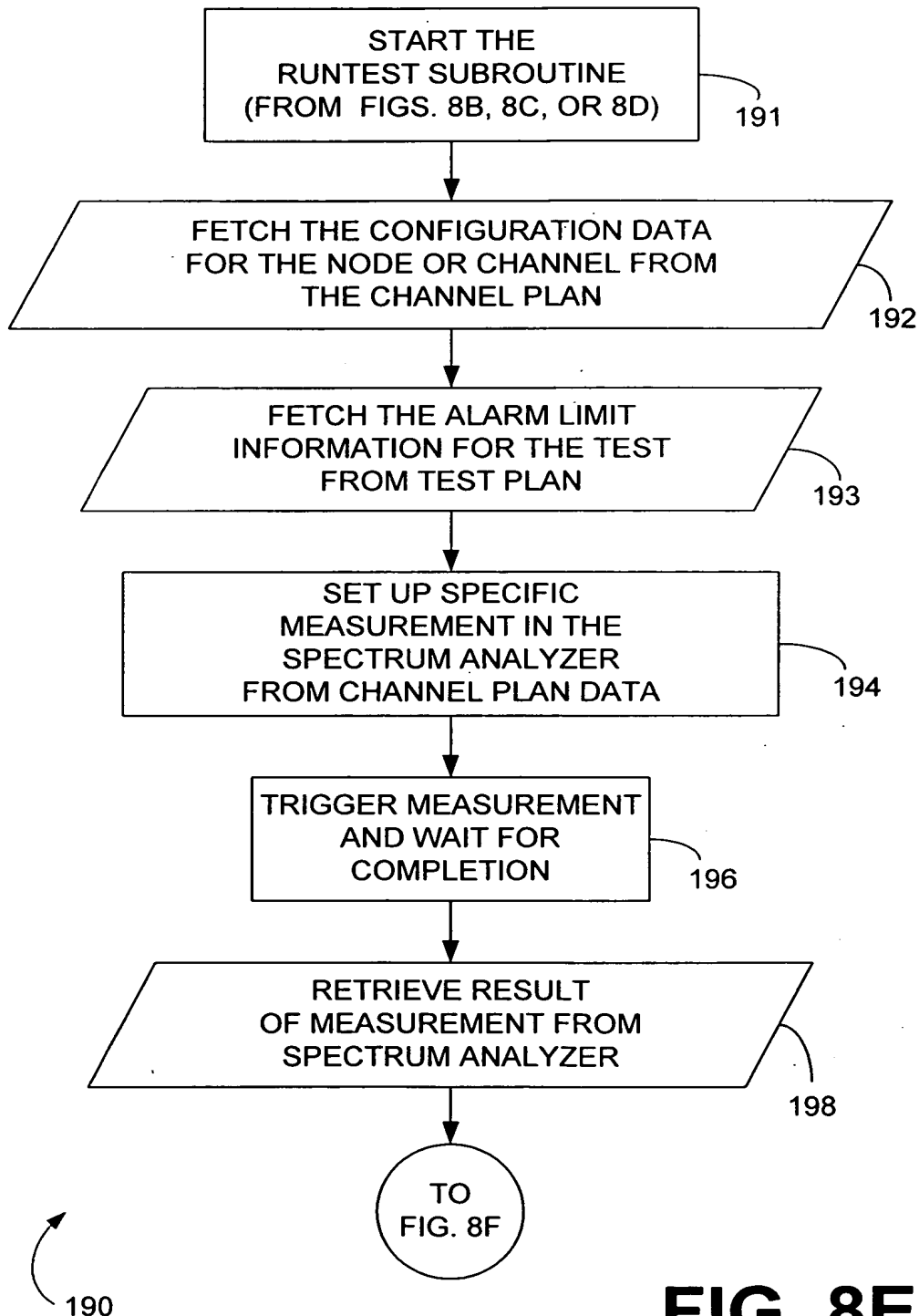
**FIG. 8C**

**FIG. 8D**  
 AUTOMATIC MODE  
 (FIRST EMBODIMENT -  
 CONTINUED)



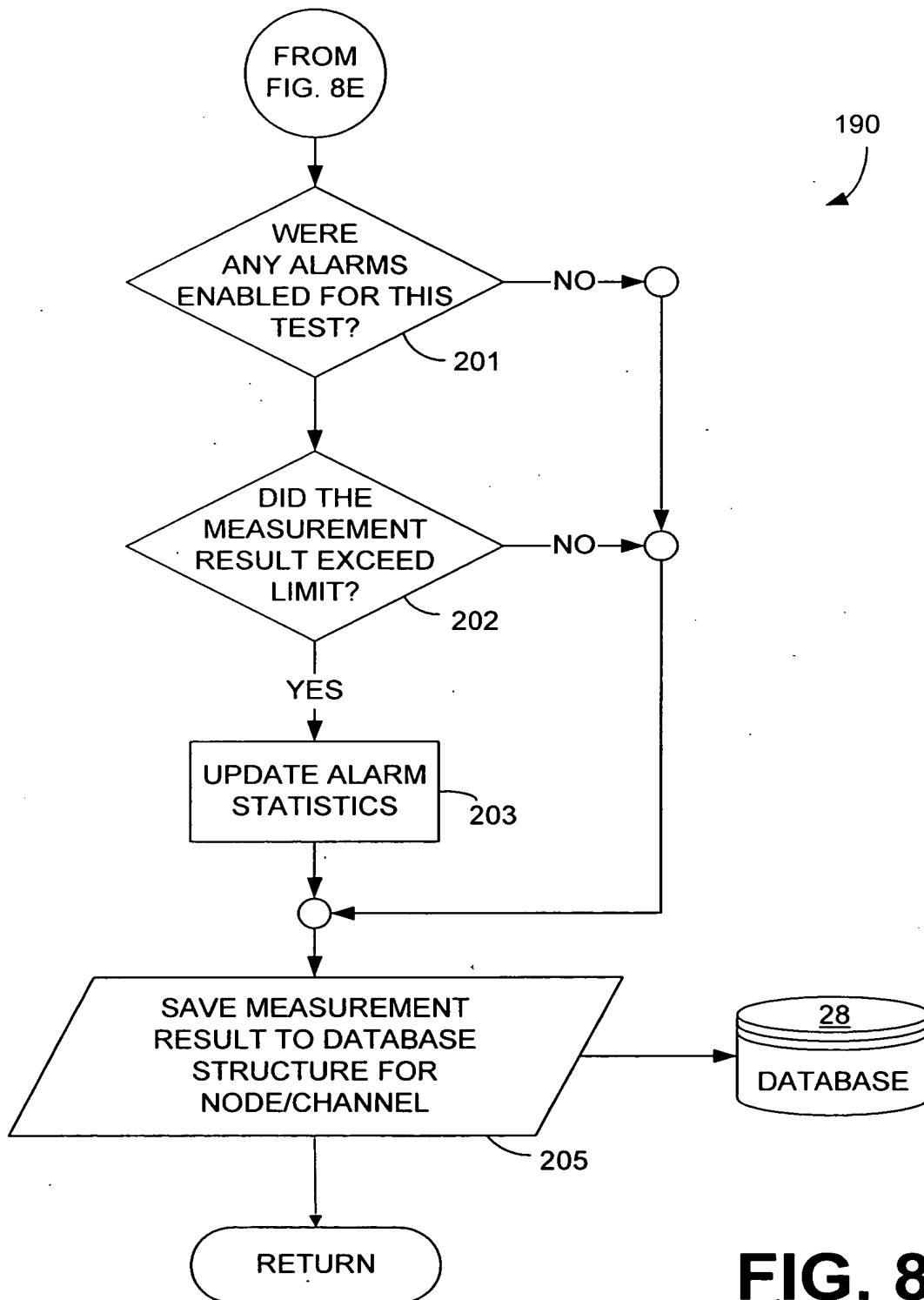
**AUTOMATIC MODE  
(FIRST EMBODIMENT - CONTINUED)**

**RUNTEST SUBROUTINE**



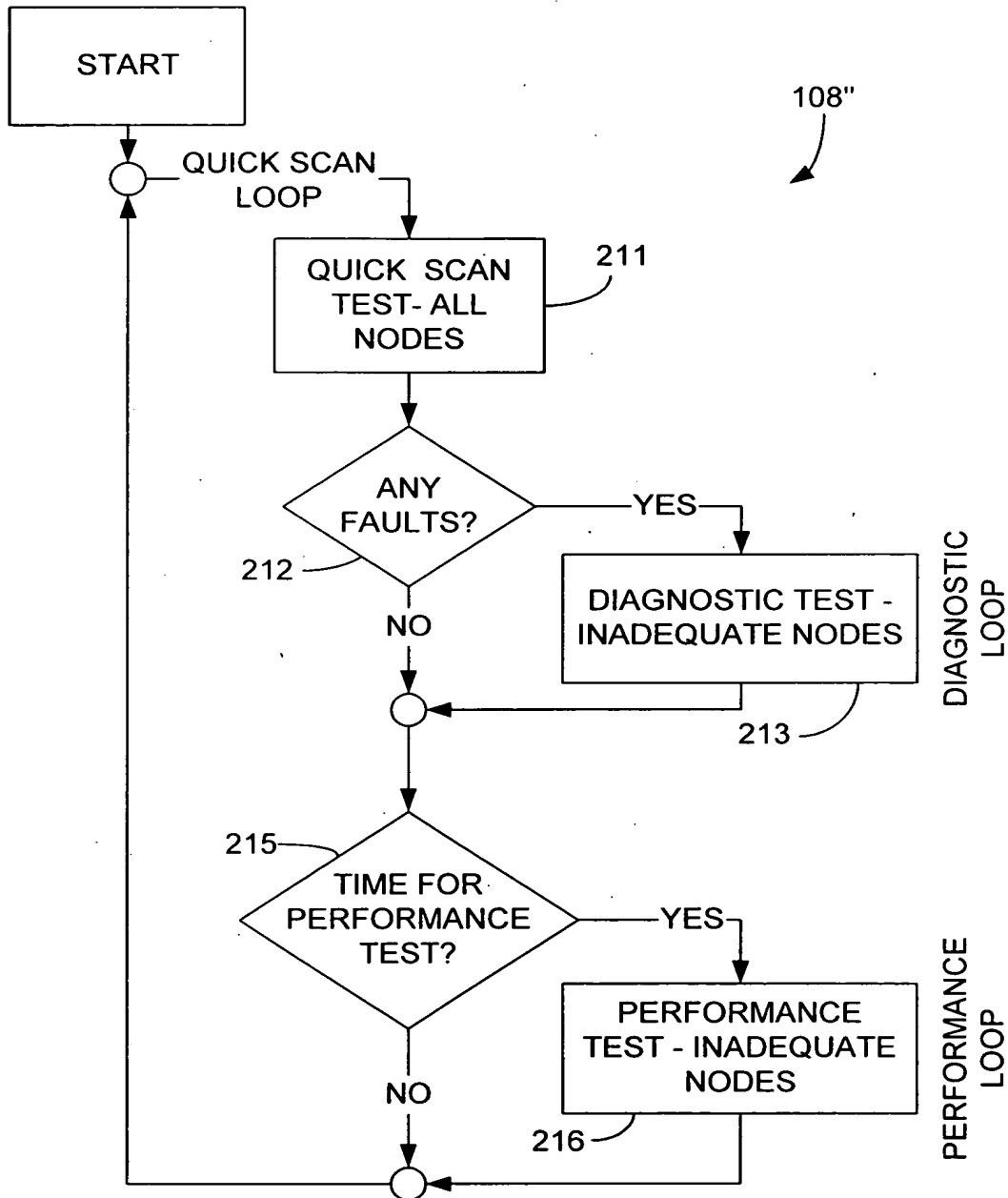
**FIG. 8E**

**AUTOMATIC MODE  
(FIRST EMBODIMENT - CONTINUED)**



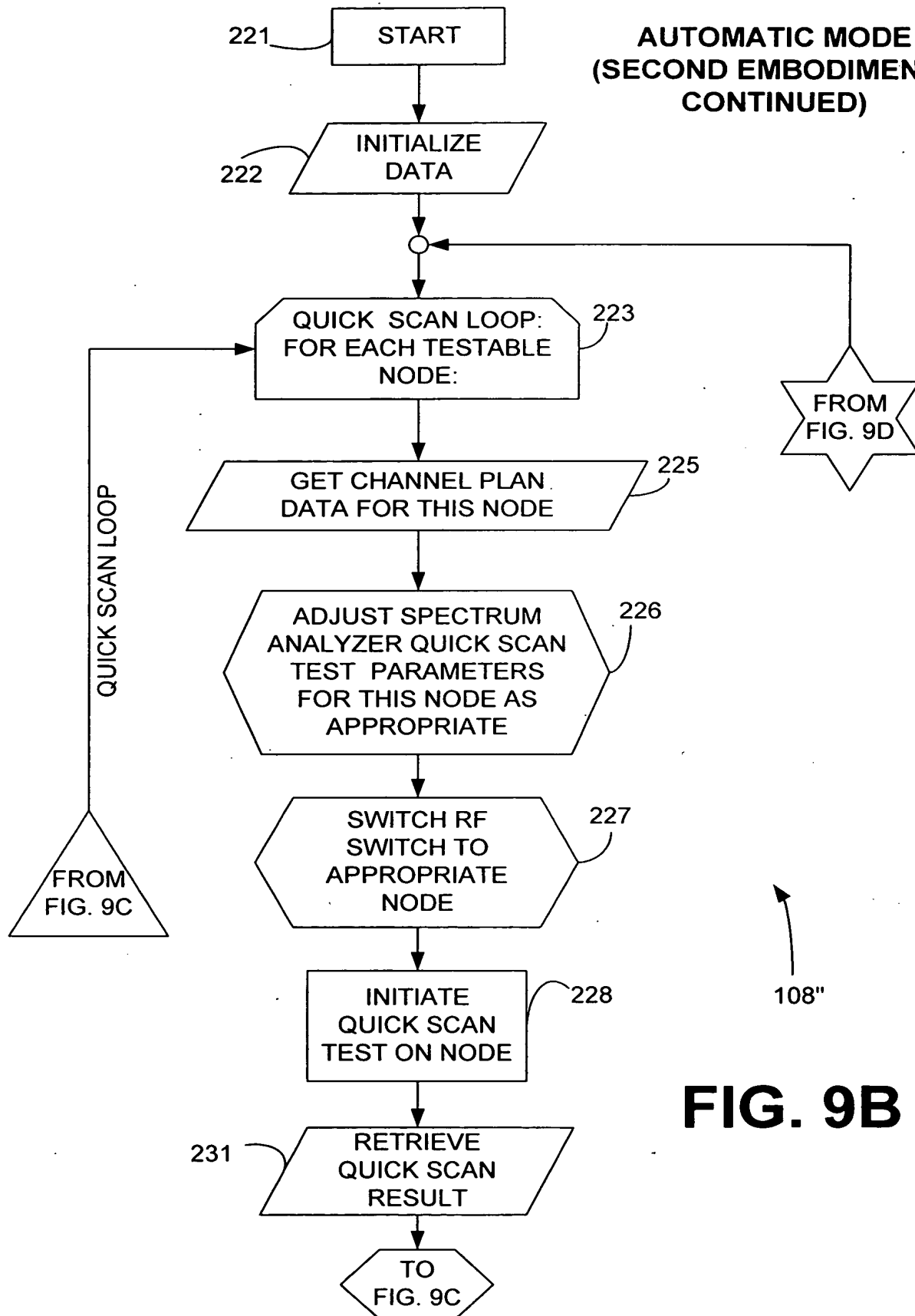
**FIG. 8F**

**AUTOMATIC MODE  
(SECOND EMBODIMENT; EMPLOYS SMART  
SCANNING ALGORITHM)**



**FIG. 9A**

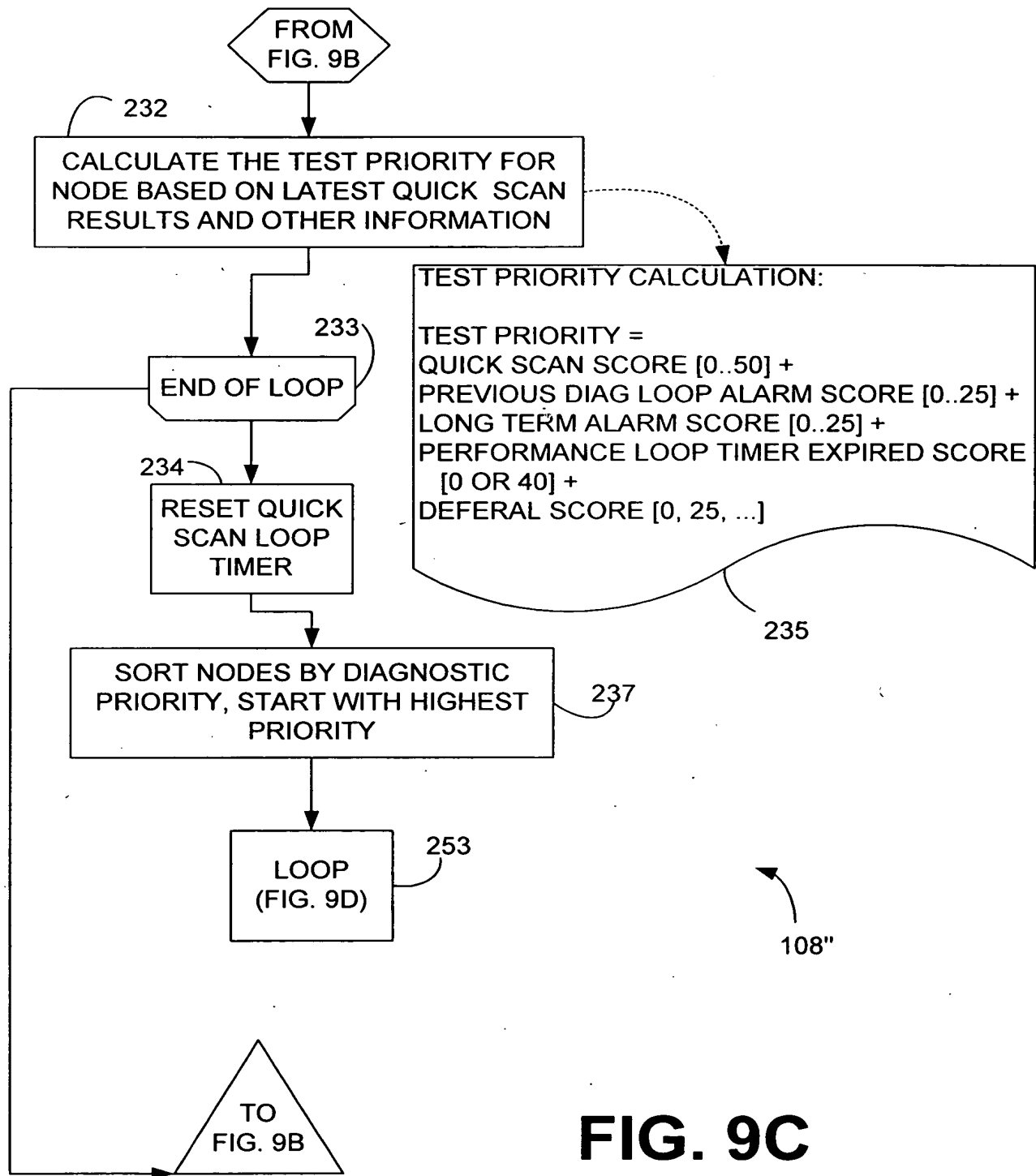
**AUTOMATIC MODE  
(SECOND EMBODIMENT -  
CONTINUED)**



108"

**FIG. 9B**

# **AUTOMATIC MODE (SECOND EMBODIMENT - CONTINUED)**

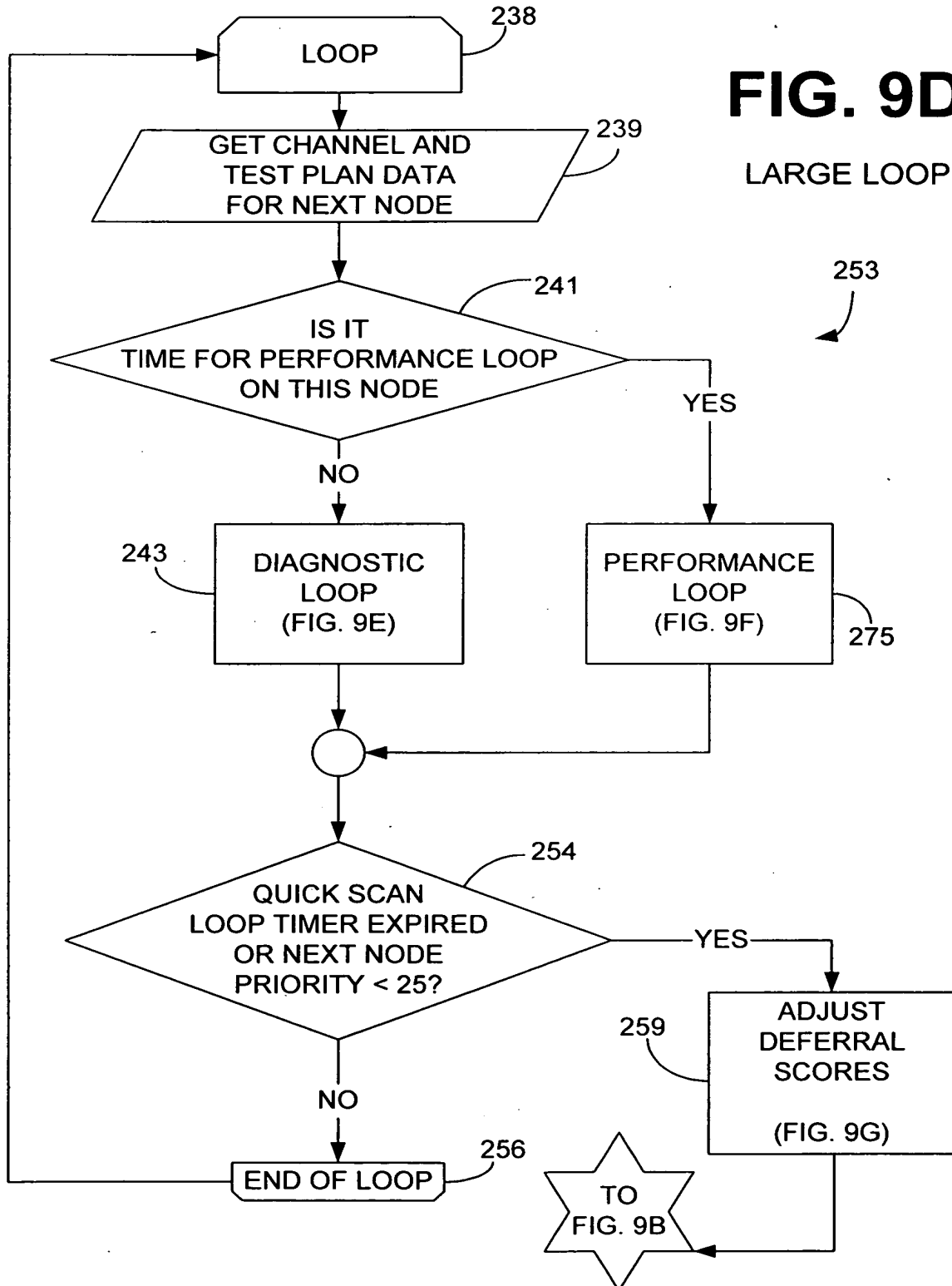


**FIG. 9C**

**AUTOMATIC MODE  
(SECOND EMBODIMENT - CONTINUED)**

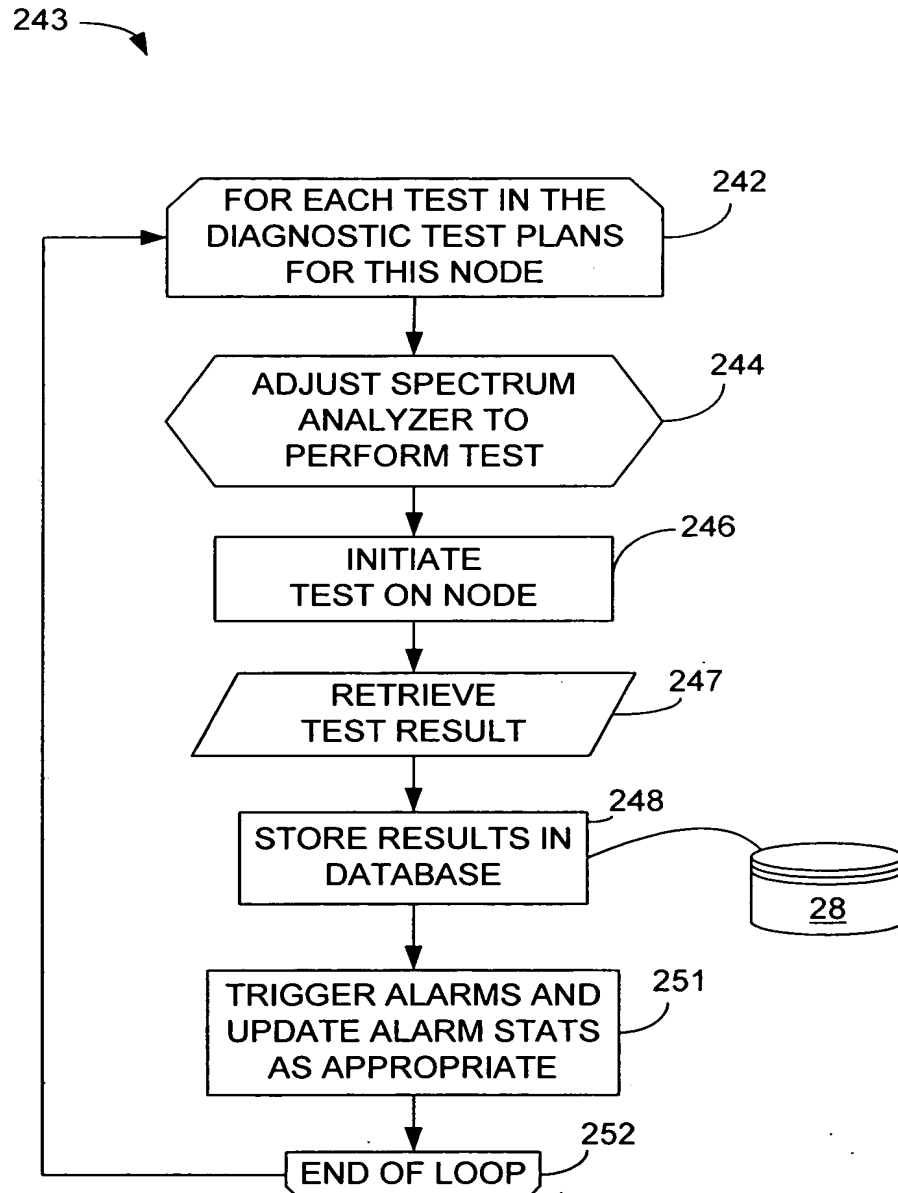
**FIG. 9D**

LARGE LOOP



**AUTOMATIC MODE  
(SECOND EMBODIMENT - CONTINUED)**

**DIAGNOSTIC LOOP**



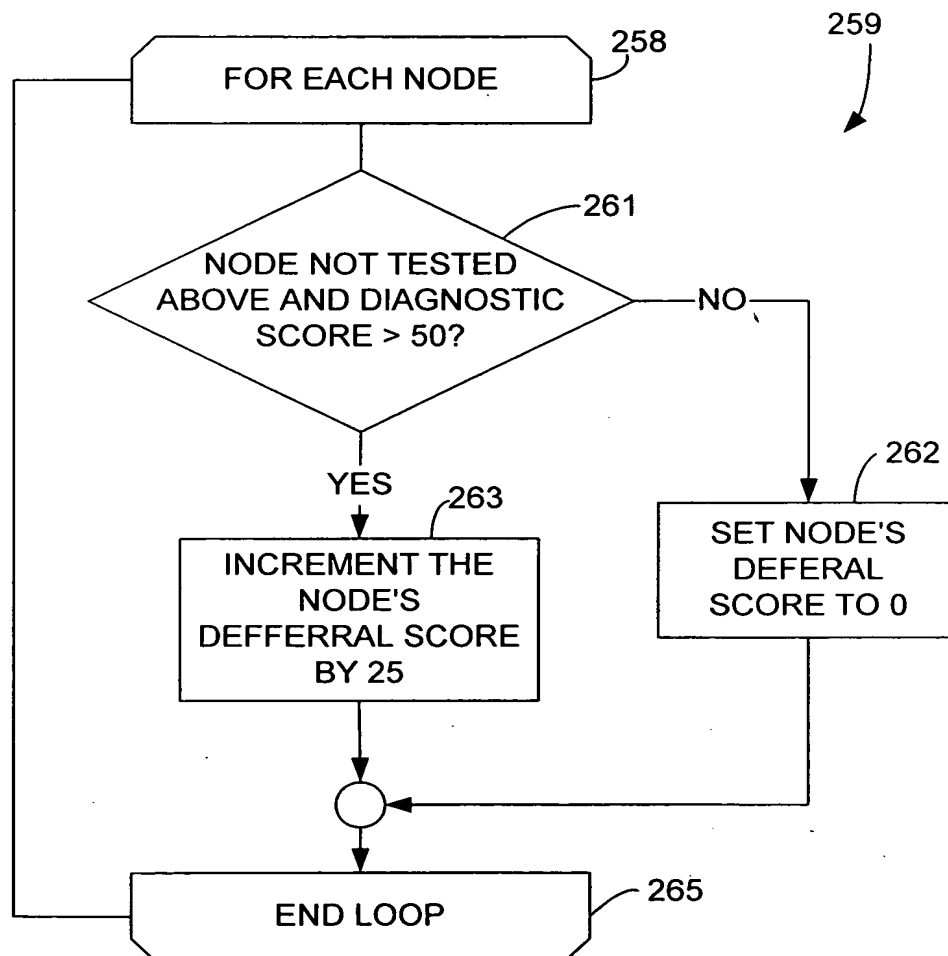
**FIG. 9E**

項目	単位	数量	金額	備考
1. 材料費	円	100	100	
2. 労務費	円	200	200	
3. 経費	円	50	50	
4. 雑費	円	10	10	
5. 減価償却費	円	5	5	
6. 税金	円	10	10	
7. 利益	円	10	10	
8. 合計	円	485	485	



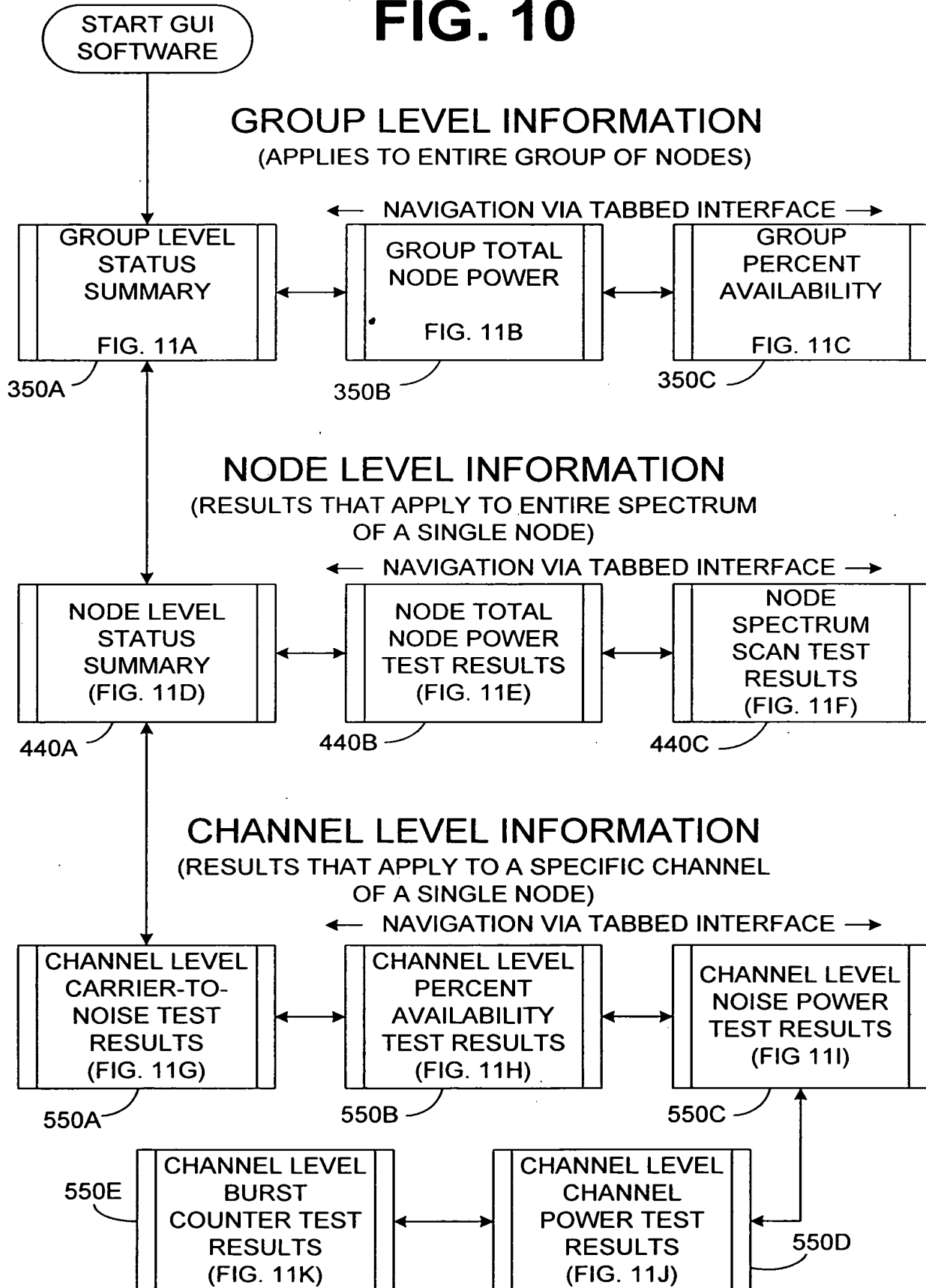
**AUTOMATIC MODE  
(SECOND EMBODIMENT - CONTINUED)**

**ADJUST DEFERAL SCORES LOOP**



**FIG. 9G**

# FIG. 10



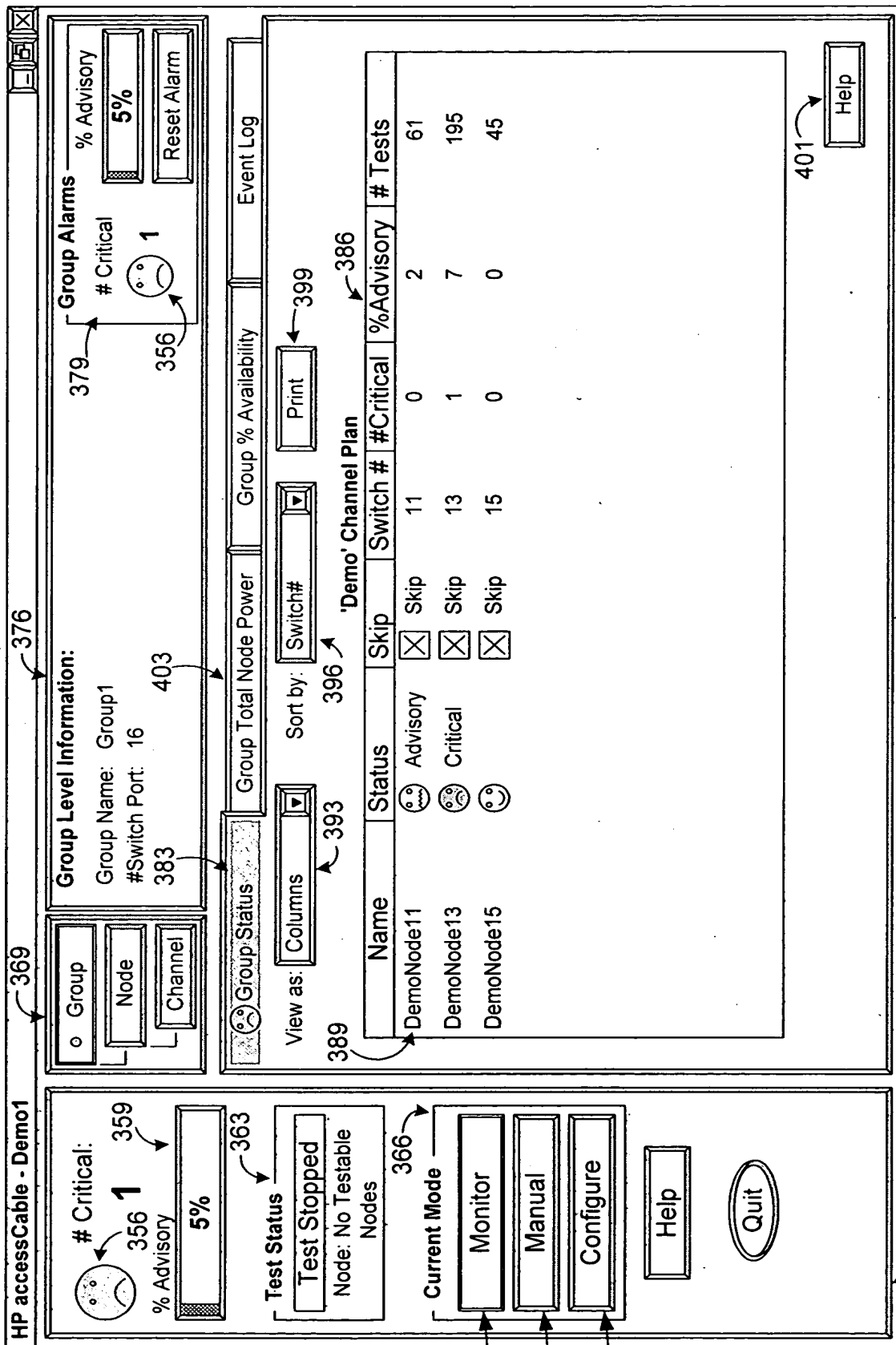
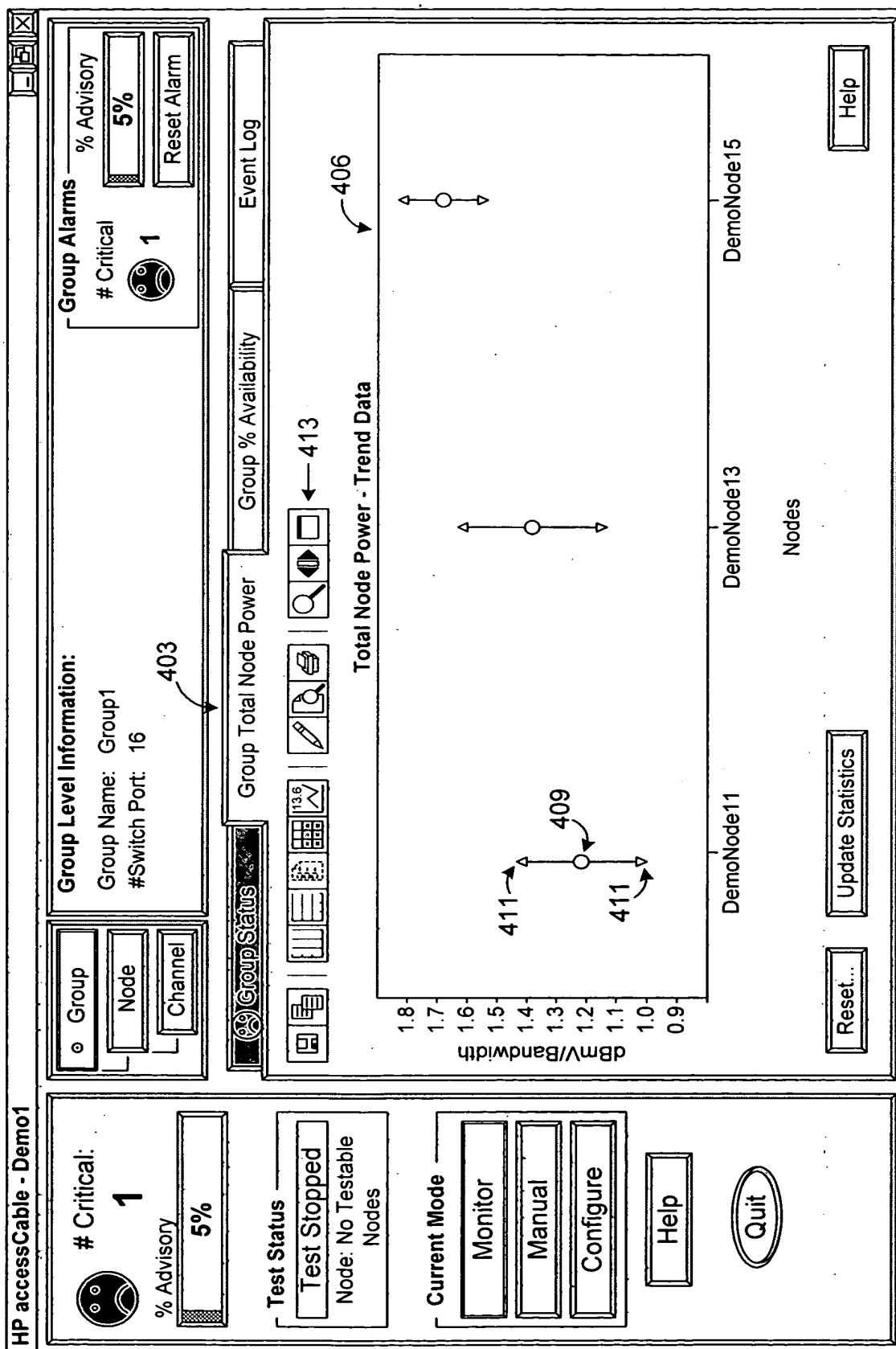


FIG. 11A



**FIG. 11B**

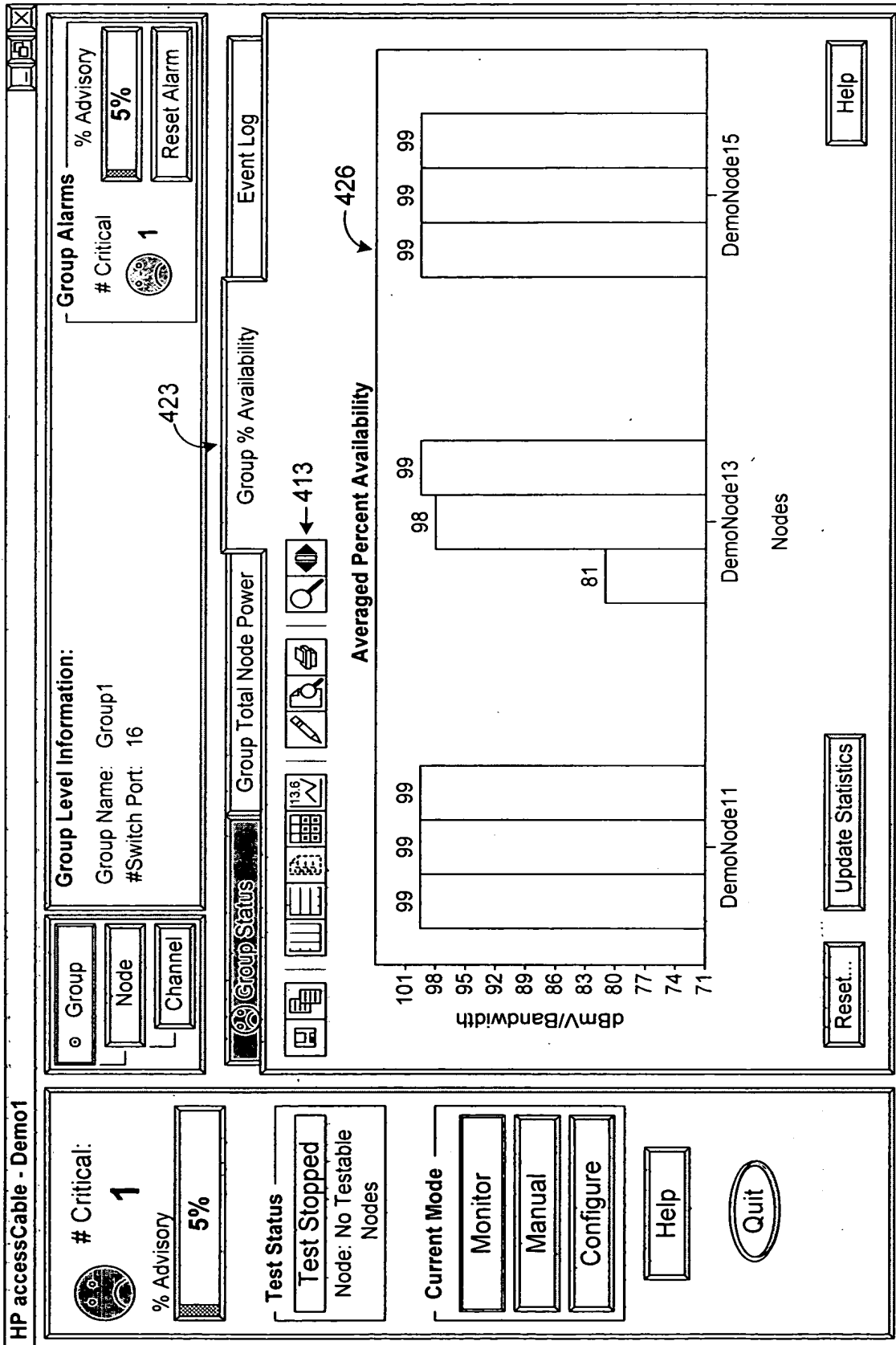
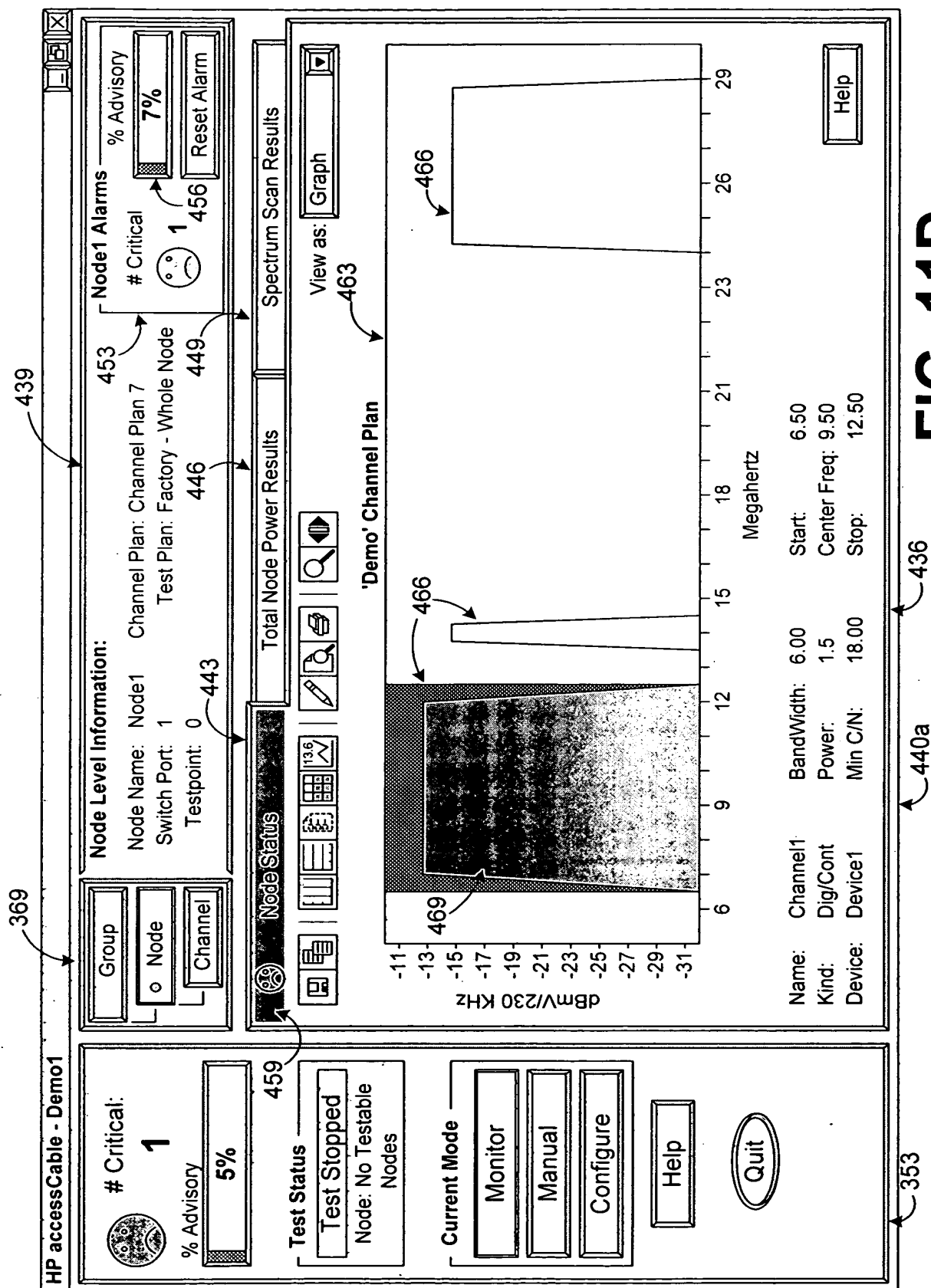


FIG. 11C



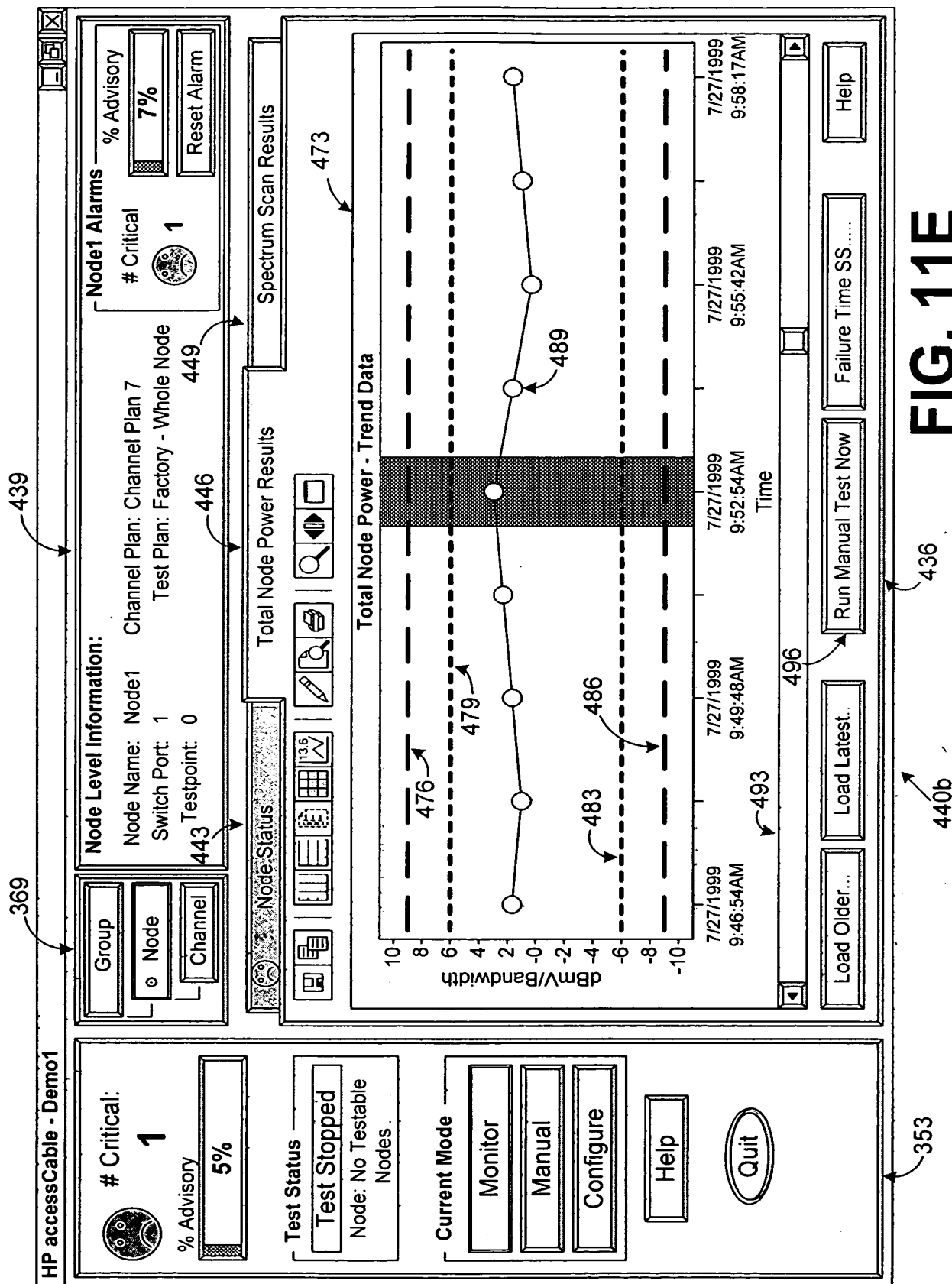


FIG. 11E

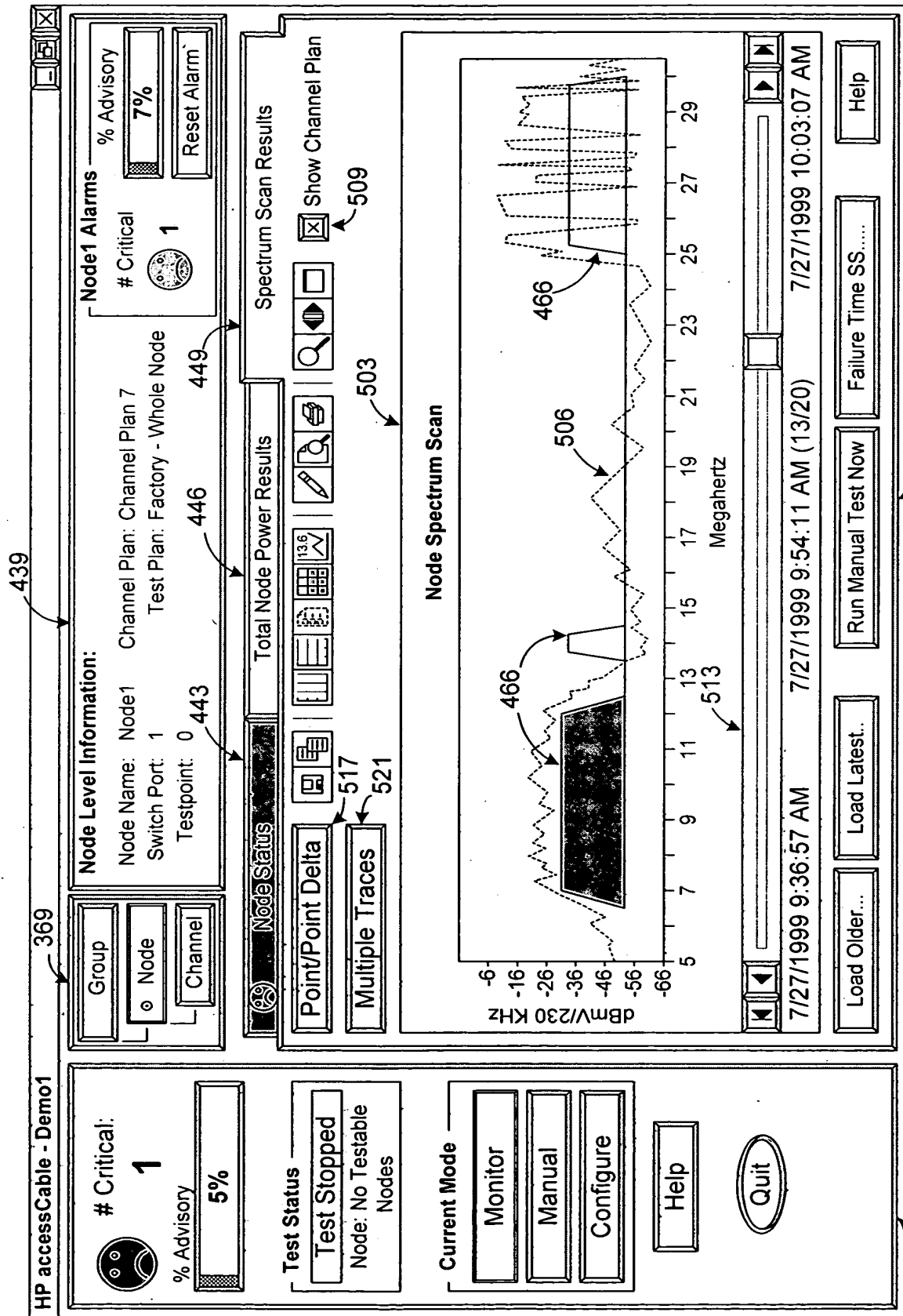


FIG. 11F

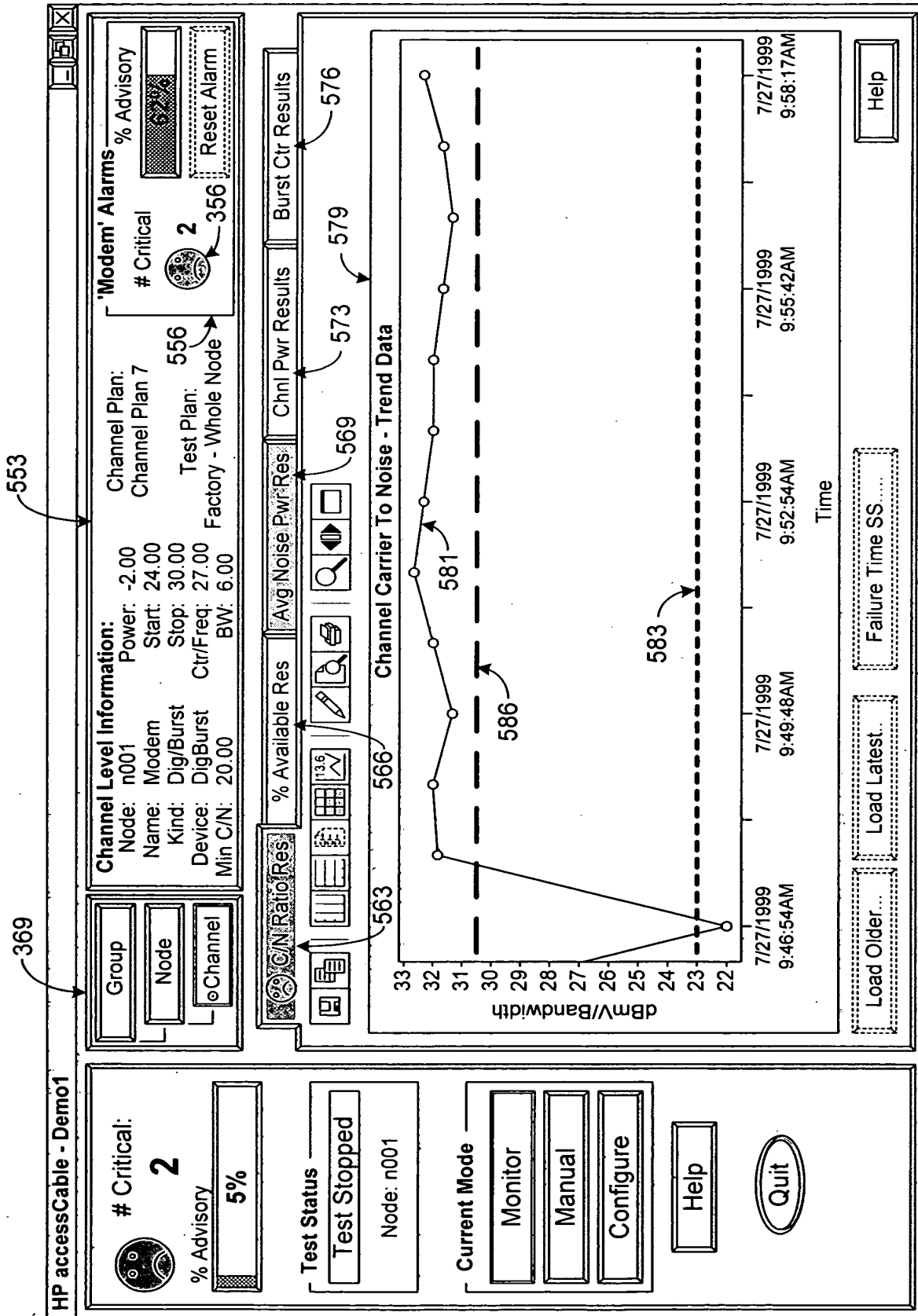


FIG. 11G

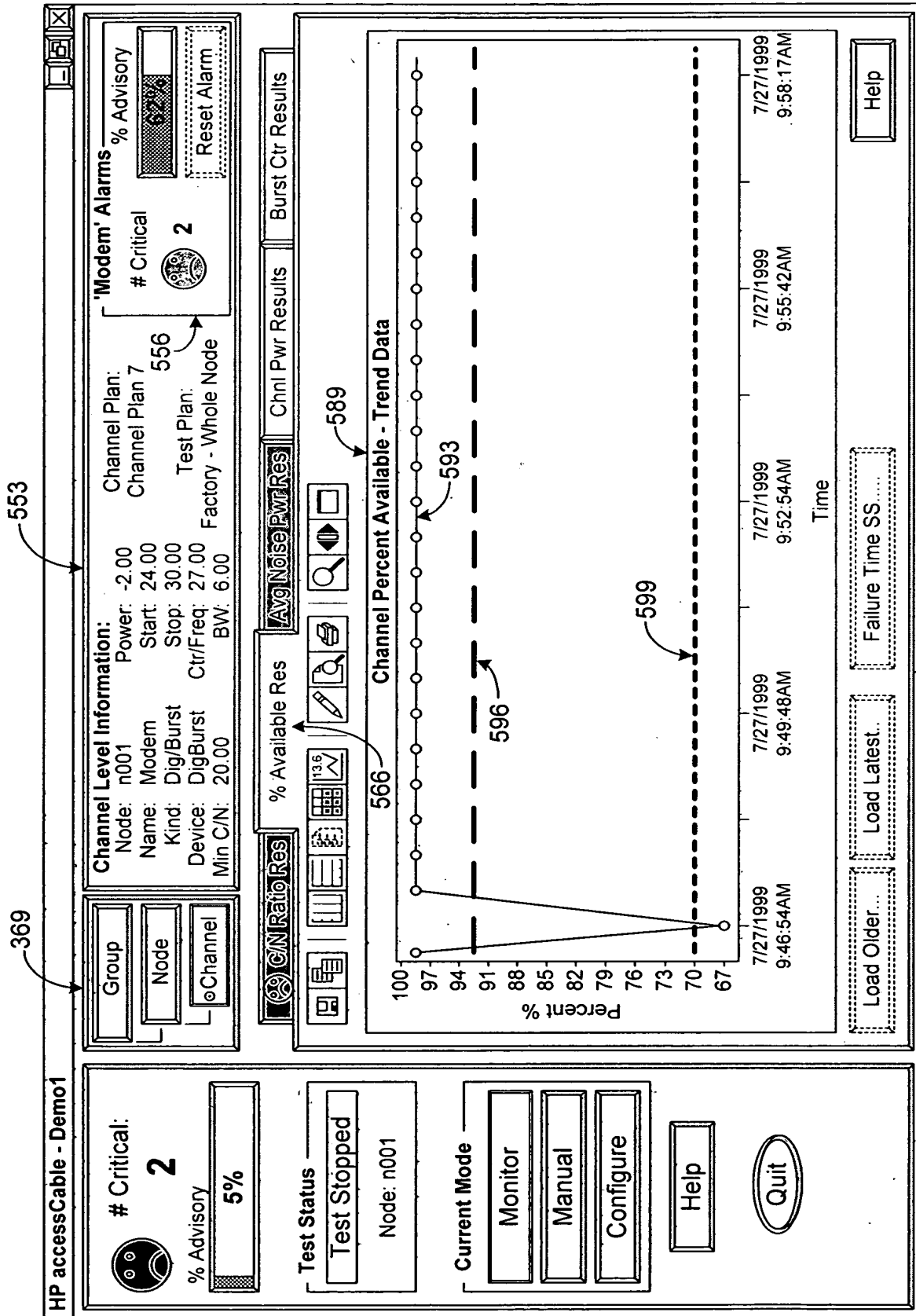


FIG. 11H

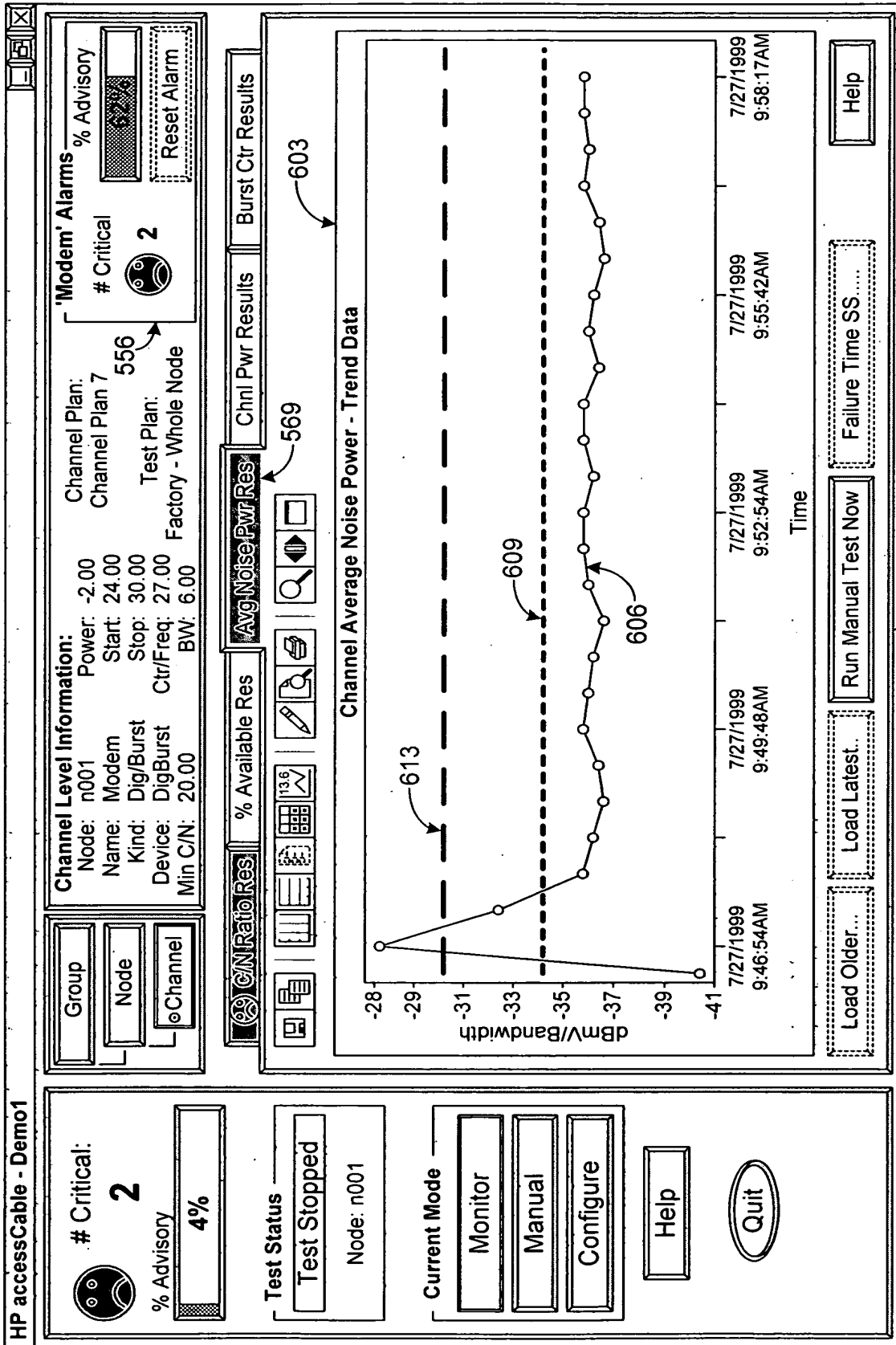


FIG. 111



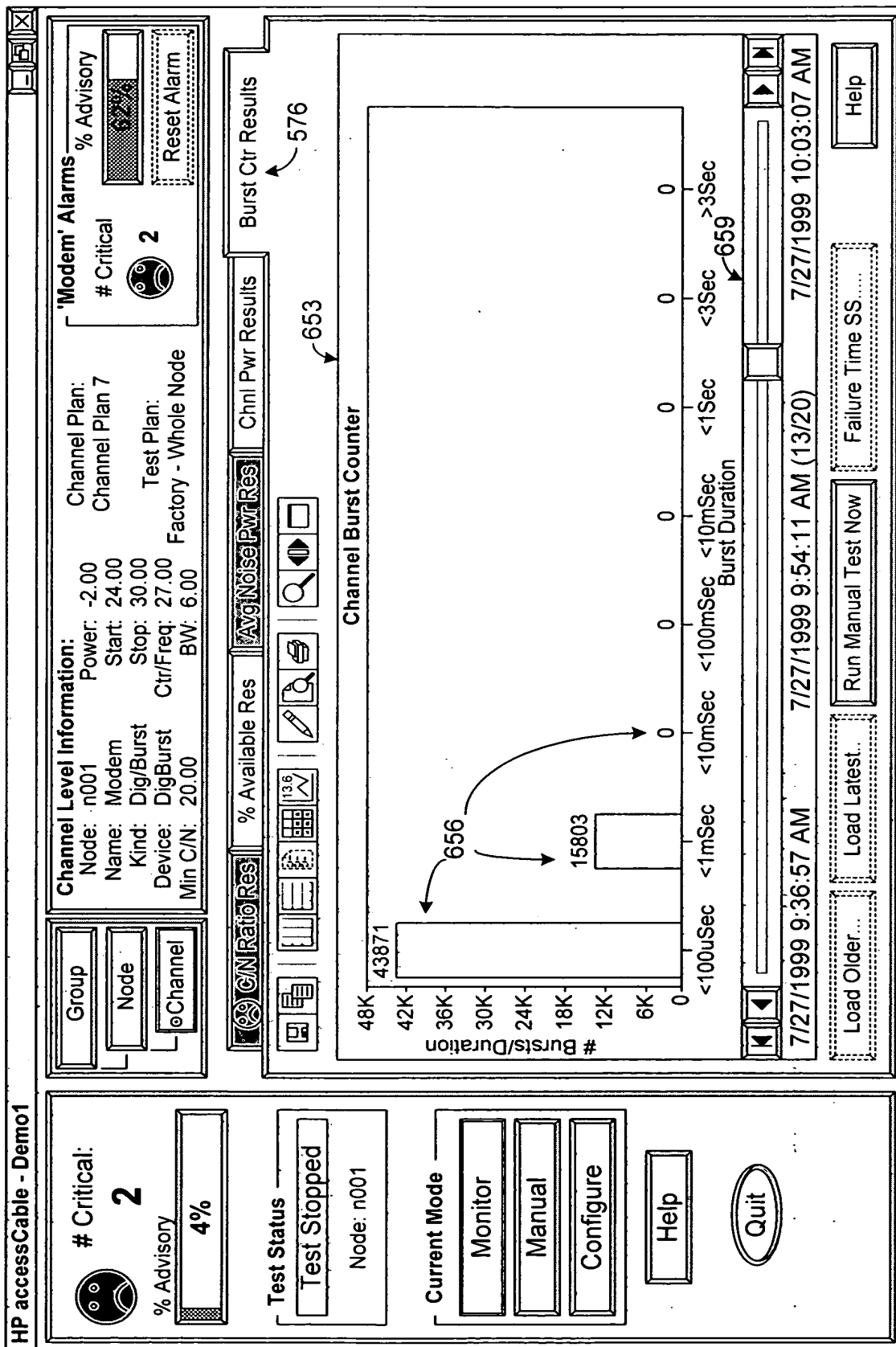


FIG. 11K

# TEST CONFIGURATION GUI NAVIGATION

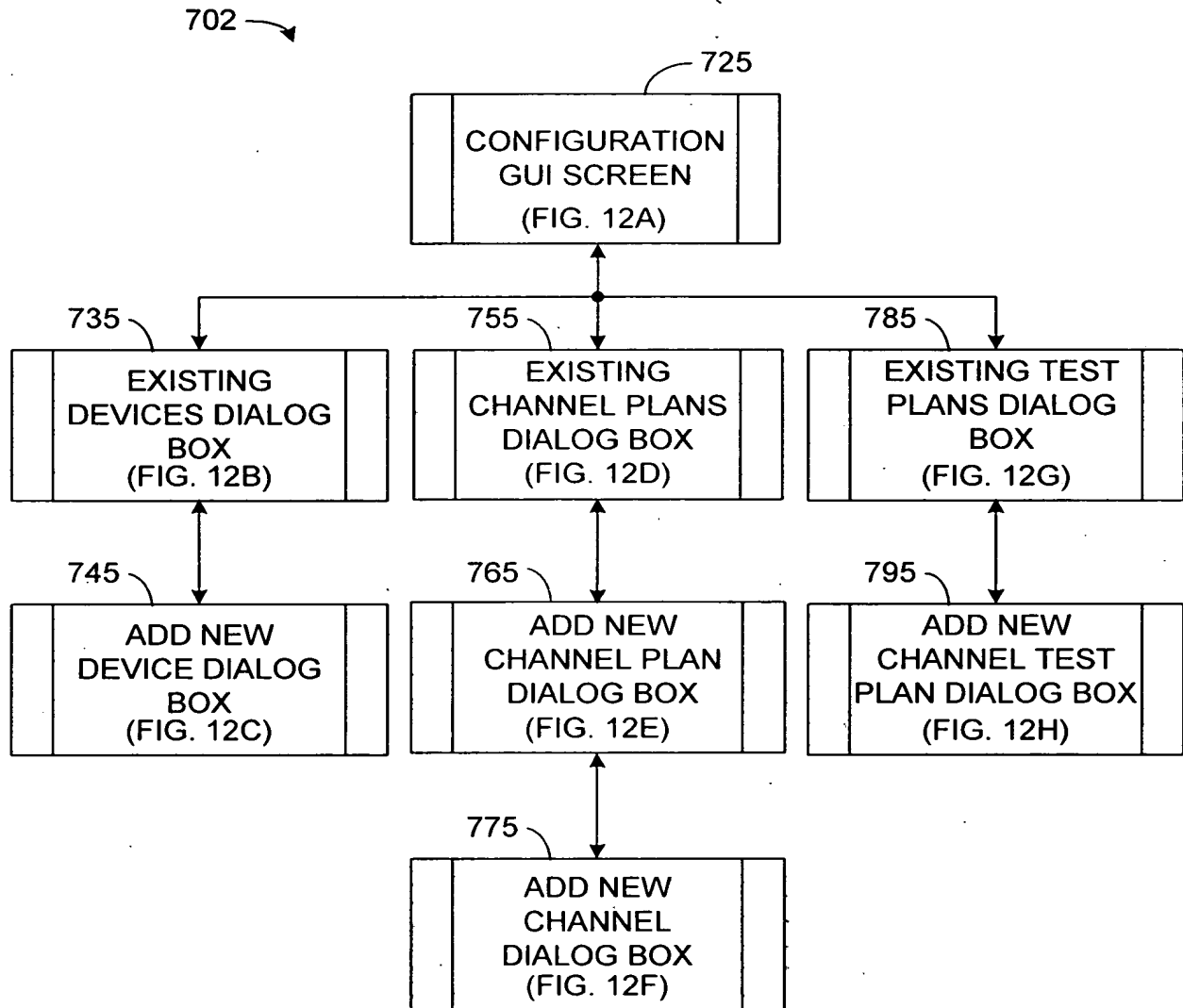


FIG. 12

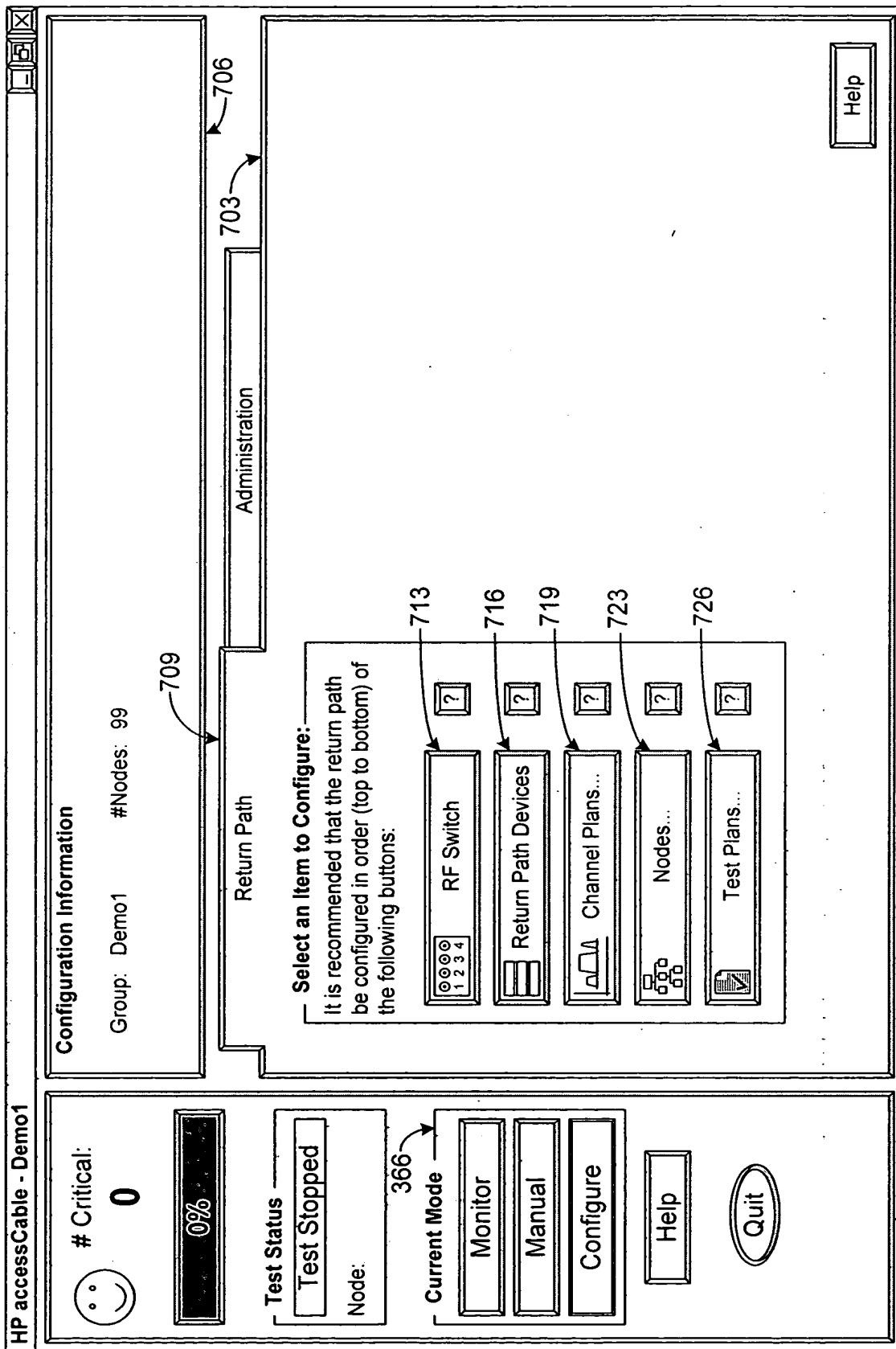


FIG. 12A

700

353

Existing Devices

Print...

Existing Devices

736

Name	Bandwidth (MHz)	Power (dB)	Min Op. C/N	Type	Comment
Modem	5.00	-2.00	20.00	Dig/Burst	

739

Add New...


Edit...

Delete...

Close

Help

FIG. 12B

753 

Existing Channel Plans

Existing Channel Plans

Name	Start Freq	End Freq	#Channels	Test Plan	Comment
Default Return Path	5.00	42.00	2	Factory - Whole Node	

Add New...

Edit...

Copy...

Delete...

Close

Help

FIG. 12D

Channel Plan

Add a New Channel Plan

Channel Plan Attributes:

Device Name:  
803

Whole Node  
Test Plan:  
Factory - Whole Node  
806

Comment:  
809  
This is Channel Plan B  
813

Return Path:  
816  
0  
819  
Start Freq (MHz):  
5  
819  
Stop Freq (MHz):  
42  
999

Channels:

View as:  
826  
List  
829  
Sort By:  
C-Freq  
833  
Print...  
836

Name	Start Freq	Stop Freq	C-Freq	B-Width	Power	Min C/N	Device	CHKind	Test Plan

Add New...  
839

Edit...

Copy...

Delete...

OK

Cancel

Help  
823

FIG. 12E

800

**FIG. 12F**

Existing Test Plans

Print...

906

903

Existing Test Plans

Name	Type	Node Pwr	SScan	Noise Pwr	Chan Pwr	Burst	C/N	% Avail
Factory - Analog Continuous Channel	Channel				X		X	X
Factory - Analog Intermittent Channel	Channel						X	X
Factory - Digital Burst Channel	Channel			X	X	X	X	X
Factory - Digital Burst FreqHopping Channel	Channel			X			X	X
Factory - Digital Continuous Channel	Channel				X		X	X
Factory - Digital Continuous FreqHopping...	Channel						X	X
Factory - Future Channel	Channel						X	X
Factory - Whole Node	Whole...	X	X					
No Tests	Channel							

909

911

913

Add New Whole Node Test Plan...

Add New Channel Test Plan...

Edit...

Copy...

Delete...

Close

Help

FIG. 12G

900

Add a New Channel Test Plan

Add A New Channel Test Plan

Test Plan Name:
Test Plan 27

☐ Disable All Critical Alarms

☐ Disable All Advisory Alarms

☒ Average Noise Power

Alarm limits are relative to expected channel power minus min op c/n for the channel.

☐ Critical

>

3

dB

☐ Advisory

>

3

dB

☒ Channel Power

Alarm limits are relative to expected channel power level.

☐ Critical

>

3

dB

☐ Advisory

>

3

dB

☒ Carrier to Noise

Alarm limits are relative to the channel's min op c/n level.

☐ Critical

>

3

dB

☐ Advisory

>

9

dB

☒ % Available

Alarm limits are absolute percentages.

☐ Critical

<

60

%

☐ Advisory

<

90

%

☒ Burst Counter

Alarm limits are not applicable.

☐ Critical

Not Alarmable

☐ Advisory

Not Alarmable

OK

Cancel

Help

925

FIG. 12H